


OPPORTUNITY IN ADVERSITY

Fast-tracking reform of the Moldovan electricity and natural gas sectors


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Aura Sabadus

Preface

Moldova's journey from energy dependency to resilience is a remarkable story of perseverance, adaptation and transformation. In less than three years, the country has managed to turn an unprecedented crisis into an opportunity for reform, securing its path towards energy independence and political stability. This journey is not only testament to Moldova's resilience but also a reflection of the strategic importance of cooperation and guidance from Moldova's partners— both in Europe and overseas.

This book presents a compelling account of Moldova's energy transformation, highlighting the accelerated reforms in the electricity and natural gas sectors. Driven by its commitments as one of the Contracting Parties of the Energy Community and the need to break free from its historical dependence on Russian energy, Moldova's journey has not been without challenges. However, while the focus is on Moldova's trials, the narrative is mindful of the broader regional context, particularly the resilience shown by those most affected by the ongoing war in Ukraine.

Since joining the Energy Community in 2010, Moldova has worked closely with the Energy Community Secretariat, which has provided steadfast guidance and support in navigating the complexities of the energy transition. Throughout these years, Moldova's commitment to aligning with European Union energy regulations has grown, even as it has faced formidable internal and external challenges.

The events that began in October 2021, when Russia abruptly limited gas supplies, mark a turning point in Moldova's energy landscape. This was a crisis that not only threatened the country's energy security but brought it close to a tipping point where the only way forward was to turn a page and choose its path of EU alignment.

This captivating study is a reader-friendly chronicle of Moldova's journey, illustrating how a country, long under the shadow of dependency, can build a more secure and sustainable future. The Energy Community is proud to have been part of this story, providing the necessary institutional framework and technical assistance for Moldova to take bold steps towards energy security and market reform. As Moldova continues on its path towards European integration, the Energy Community remains committed to supporting its efforts to achieve a fully liberalised and resilient energy sector.

This book serves as a valuable record of the challenges Moldova faced and the progress it has made. It is also a reminder that collaboration, guided by a shared vision of energy security and market transparency, can turn even the greatest crises into opportunities for meaningful change.

I hope that Moldova's story offers inspiration to other Energy Community Contracting Parties facing similar challenges, proving that with determination and resolve even the most vulnerable countries can rewrite their energy futures.

Artur Lorkowski
Director, Energy Community Secretariat

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ABBREVIATIONS

ANRE	Agenția Națională pentru Reglementare în Energetică (National Agency for Energy Regulation of the Republic of Moldova)
APP	Agenția Proprietății Publice (Public Property Agency)
BRM	Bursa Română de Mărfuri (Romanian Commodities Exchange)
CET	Centrale electrice de termoficare (Heating power plants)
CSE	Comisia pentru Situații Excepționale (Commission for Exceptional Situations)
ECS	Energy Community Secretariat
EFET	European Federation of Energy Traders (now renamed Energy Traders Europe)
ENTSO-E	European Network of Transmission System Operators for Electricity
ENTSOG	European Network of Transmission System Operators for Gas
GTSOU	Gas Transmission System Operator of Ukraine
GWh	Gigawatt hour
Hz	Hertz
ISO	Independent System Operator
ITO	Independent Transmission Operator
mcm	million cubic metres
MWh	Megawatt hour
OU	Ownership unbundling
OPCOM	Operatorul Pieței de Energie Electrică si de Gaze Naturale (Market operator for electricity and natural gas)
VMTG	Vestmoldtransgaz

INTRODUCTION

If ever a country could speak of turning adversity into opportunity, it would be Moldova.

Within four years of facing some of the worst crises in recent history caused by a crippling reliance on Russian energy resources, the country is now more confident in its ability to determine policies and shape its future.

Many of the changes that have been afoot since 2021 are testament to the efforts of Moldova's government and private sector representatives to align with European energy market regulations, as well as the support of international partners such as the Energy Community and the EU, which mobilised large funds, human resources and expertise to help Moldovans through exceptionally difficult moments.

Nevertheless, the sea-change that was set in motion in October 2021, and which this study sets out to describe in detail, also came at the end of three decades of political convulsions, social disquiet and widespread corruption which paralysed the country and threatened its existence.

Since gaining its independence from the Soviet Union in 1991, Moldova endured some of the most traumatic experiences among all former communist countries: a war against Transnistrian separatist forces supported by Russia's 14th Army, a collapse in its GDP, no fewer than 21 governments, mounting debt, poverty, delinquency and a steep demographic decline.[1]

Many of those problems stemmed from the fact that Moldova is a resource-poor country which has been struggling to access cheap natural gas and electricity for its population.

The collapse of the Soviet Union left it not just with the intractable problem of securing energy supplies but also with a highly complicated electricity and gas transmission infrastructure that allowed Russia to retain a grip over its population and stoke political instability.

As of 2025, the aggregated corporate debt accrued by Russian-controlled incumbent JSC Moldovagaz for natural gas supplied by Gazprom exceeds USD 10 billion but the sum owed by the Right Bank of the River Nistru, also informally described as Moldova, is only a fraction of the money owed by the separatist Left Bank known as Transnistria.[2]

Russia's gas producer and supplier Gazprom maintains that the Right Bank's own debt stands at USD 709 million.[3]

However, internal and external audit reports, including by independent international consultants, disprove the claims, showing how the Right Bank placed its strategic transmission and distribution assets under Gazprom's control to settle the debt caused by inflated prices and hefty penalties, only for those assets either to be undervalued or used to clear arrears accrued by the Left Bank.[4]

Meanwhile, even though Transnistria's share of the debt has been soaring to ever new highs over the last three decades, Gazprom continued to deliver cheap gas to the region's Russian-speaking population, supporting its non-recognised authorities and implicitly fanning separatism.

Russia's delivery of cheap gas to Transnistria has also created a tangle of economic dependencies for Moldova, which has been relying on the 2.5 GW thermal power plant Moldavaskaya GRES (MGRES) for electricity supply at affordable prices.

Nevertheless, Transnistria's cheap electricity supply came with an expensive security price tag, as the Right Bank was unable to build its own generation capacity over the three decades since independence, leaving it dangerously reliant on the Russian-controlled region.

Gazprom's deliberate policy of exporting natural gas to the Right Bank at expensive prices that were often adjusted depending on the loyalty of local political elites, while delivering supply to the Left Bank at no cost over the last decade,[5] led to major internal economic imbalances.

Transnistrian consumers had been paying EUR 4.5-6.00/MWh for natural gas and EUR 31-EUR 41.00/MWh for electricity. If prices were to be raised to market levels, gas tariffs would have to rise tenfold while electricity prices would have to increase fivefold.[6]

Over the years, the country's reliance on Russian resources blocked any attempts to diversify supply, introduce much-needed reform and emerge from political isolation.

2021

Moldova experiences first major energy crisis...

caused by Russia and starts determined efforts to **align with EU market rules.**

USD 709 million

claimed by Gazprom

but audits dispute it — Moldova bears the debt while **Transnistria gets free gas**.

“Most abusive contract ever written”

Moldova’s secret gas deal with Gazprom, exposed in 2021, **gave Russia sweeping control over the country’s energy system.**

State of emergency

In October 2021, gas pressure fell below safe levels. **As the gas grid faced collapse, authorities pleaded for EU help.**

Although Moldova became a Contracting Party of the Energy Community in 2010,[7] committing to adopt and implement the EU’s energy market regulations, it took another decade until it could finally enact overdue changes.

Part of the blame for the extensive delays lies with Russia, which opposed the implementation of critical steps, such as the unbundling of gas transmission operations.

However, the local ruling elite also bears some of the responsibility given its passive acceptance of Moscow’s influence over the past three decades, failure to defend its country’s interests and outright engagement in debilitating corrupt practices that undermined Moldova’s security.

Professor Alan Riley, a competition law scholar commissioned by the EU to support Moldovan authorities, was so shocked to see the terms of the old Russian gas supply agreement, which had been hidden from public scrutiny and which expired in September 2021, that he described it as the most “abusive contract that had probably ever been written.”

He said the powers that Moldova had ceded to Gazprom over the years had been so extensive that they raised suspicions whether the country ever took legal advice to defend its interests.[8]

It was against that background that Russia’s Gazprom limited the gas supply to Moldova in October 2021, just as the country was facing rising winter demand, intending to deter it from aligning with European rules following the election of a pro-EU president and parliament.

The newly appointed pro-EU government had barely been in office for a few weeks, while some officials tasked to oversee the energy sector were just starting on the job and had limited experience of the industry.

As consumption was rising and supply remained limited by mid-October, gas pressure in the transmission pipelines started to drop below the risk threshold, prompting the urgent deployment of technical staff to monitor valves in the system amid fears of accidents.

With the transmission system close to collapse, the government declared a state of emergency and began to reach out to EU partners, pleading for urgent help.

Moldova needed to secure alternative gas supply, but it had no experience in buying volumes on markets and its financial resources were limited just as gas prices on European hubs were beginning to rise.

The EU and the Energy Community, however, responded, providing financial assistance, technical guidance and sending several experts to offer emergency support.

Those who travelled to Chișinău immediately understood the enormous difficulties lying ahead.

Their task was to secure emergency gas supply but to do so, they needed to use a reliable, internationally recognised buying entity with a good rating record, legislation supporting the organisation of auctions and experienced staff to assist in organisation of the tenders.

The country could hardly meet any of those basic requirements.

As a company majority-owned by Gazprom, the gas incumbent Moldovagaz was excluded from the start, which meant the only possible option was the state-owned wholesaler Energocom, a small company established in 2004, primarily to import electricity.

Against all odds, the government, with support from international experts, worked to capitalise and consolidate Energocom to ensure it could be used as a vehicle to secure Moldova's gas imports from European markets. Thanks to resolute efforts, they managed to save the system from collapse and keep consumers warm just as the cold weather was setting in.

The timely commissioning of the Iași–Ungheni–Chișinău interconnector with Romania in October 2021[9] also helped to provide a critical alternative to Moldova's historic reliance on Russian gas.

When the first non-Russian volumes started to reach the country in the final days of October 2021, Russia understood that although Moldova was still vulnerable, it could no longer be blackmailed.

It agreed to negotiate a new five-year contract on terms that, for the first time ever, were favourable to Moldova, even though it attempted to reiterate political conditions such as the federalisation of the country, which were eventually abandoned.

Yet, the October 2021 supply crisis was just one in a series of many more to come, including Russia's full-scale invasion of Ukraine in February 2022, a refugee crisis as thousands of Ukrainian women and children sought shelter in Moldova, record energy prices triggered by Gazprom's decision to cut more than 80% of supply to European buyers, soaring inflation and last, but not least, the curtailment of gas supplies to the Russian-speaking population of Transnistria in the winter of 2024/25.

In 2022, facing extreme conditions and the risk of blackouts, Moldova followed Ukraine in its historic decision to unplug from the Russian and Belarusian grids to which they had been connected since Soviet times and synchronise with the European continental power grid operating under the umbrella of the European Network of Transmission System Operators for Electricity (ENTSO-E).

The two countries, which had been operating as a bloc, disconnected from the Russian grid just hours before the start of the invasion and remained in full isolation until 16 March, when the final Isaccea–Vulcănești power line connected Moldova to Romania.

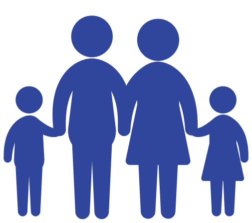
Experts who had been monitoring events said the isolation test which countries aiming to synchronise with the ENTSO-E grid need to perform for a short period of time is exceptionally difficult. However, Ukraine's ability to keep the full bloc at a stable 50 Hertz (Hz) frequency in full isolation for nearly a month, while facing unspeakably difficult circumstances as Russia was bombing its energy infrastructure, was simply unheard of.

The remaining months of 2022 proved just as strenuous, while also yielding important results for Moldova.

After more than 30 years of delays, Moldova finally took steps to implement its electricity balancing market and resumed electricity imports from Ukraine in spring 2022.

It worked closely with the EU to secure vital grants to help consumers pay rising electricity and gas bills.

Diana Jabłońska, head of unit responsible for Georgia, Moldova and Economic Investment Plans for Eastern Neighbourhood at the Directorate-General for Neighbourhood and Enlargement Negotiations (DG NEAR)[10], recalled how the EU worked at record speed to mobilise EUR 240 million.



Some of that money helped around 750,000 Moldovan families to pay their bills in winter 2023/24 alone.

In exchange, the country was required to implement market reform, including establishing a much-needed programme to support vulnerable consumers. Additional support was also provided through macro-financial assistance, humanitarian aid support, as well as continued assistance through bilateral and regional programmes.[11]

To gain expertise, Moldova also reached out to international partners such as the Energy Community and USAID to help bolster its energy security and to consolidate Energocom by hiring new people and training its staff. Authorities entered into negotiations with the European Bank for Reconstruction and Development (EBRD) to secure a EUR 300 million revolving credit line for Energocom (as a project implementation unit) to buy natural gas ahead of winter and later started to expand regionally, including opening a branch in Romania.

As it was losing ground, Russia's Gazprom began to threaten Moldova every month with the interruption or limitation of natural gas supply if the country failed to pay in advance for gas imports. Although there had been delays in paying for deliveries in the past, Gazprom had never resorted to such behaviour.

By the beginning of October 2022, Gazprom once again limited the gas supplied to Moldova, creating a major shortfall at a time when Ukraine had also stopped exporting electricity as Russia unleashed its destructive missile and drone attacks on Ukrainian energy infrastructure. The Moldovan gas deficit was used as an excuse by Transnistria to suspend power supply to the Right Bank, amid claims it was not receiving sufficient gas to generate electricity.

Faced with a new crisis, the government and Energocom turned to Romanian institutions and companies, including the local power exchange, OPCOM, to secure supply, even if the costs were considerably higher as Europe was reeling from the Russian-induced energy crisis throughout most of 2022.

2022
Moldova in the dark

In 2022, missile strikes on Ukraine twice cut off Moldova's electricity **— entire regions plunged into blackout.**

+ EUR 100 million in emergency electricity imports

With Transnistria cutting supply, **Moldova turned to Romania's OPCOM market despite sky-high energy prices.**

Moldovans used war-tracking apps

To prepare for blackouts, citizens downloaded Ukrainian alert apps — energy security met digital survival.

On two occasions, Moldova was also plunged into darkness as the Russian attacks on Ukrainian infrastructure were so powerful that they led to the disconnection of transmission lines, affecting the small neighbouring country. Many Moldovans were downloading Ukrainian smartphone apps to track the Russian attacks in real time and prepare for potentially more blackouts.

Yet, once again, the Right Bank's resilience and ability to secure alternative supply despite all odds sent the powerful message that it could not be blackmailed.

In fact, Moldova's decision to send all Russian gas supply to the Left Bank, since it was in the position to secure alternative volumes regionally, forced the Transnistrian power producer to resume electricity supply to the Right Bank and prepare for more decisive steps in the new year.

The highlights of 2023 were undoubtedly the overdue divestment of Moldova's electricity and gas transmission operations and the publication of an independent audit by Norway-based Wikborg Rein law firm together with UK-based consultants Forensic Risk Alliance, which disproved Russia's claims of Moldova's gas debt of USD 709 million.

Given Gazprom's long-running opposition, the unbundling of gas transmission operations required a creative approach. The Energy Community, which had supported Moldova throughout all its steps towards creating efficient energy markets, was also instrumental in advising the country to understand the complexities of the unbundling and certification process.

That involved changing the relevant legislation to help facilitate the removal of transmission operations from Gazprom's control and transfer them via a lease agreement to Vestmoldtransgaz, a company which had hitherto been in charge of Moldova's Iași–Ungheni–Chișinău interconnector with Romania.

Within a year of the unbundling, the gas and electricity grid operators were certified as independent system operators by the regulator ANRE but the solidity of their certification is yet to stand the test of time.

The unbundling model followed by Moldova was, to a large extent, inspired by Poland's own experiences in transferring the gas transmission operations of the Polish section of the Yamal pipeline from EuRoPol Gaz, a company partially owned by Gazprom, to the Polish transmission system operator, GAZ-SYSTEM, in 2010.

At the time, the Energy Community's director, Artur Lorkowski, was deputy director of the economic department with responsibility for energy security and climate issues in Poland's Office of the Committee for European Integration and later held the same position at the Polish Ministry of Foreign Affairs when the two merged on 1 January 2010.

Reflecting on his own Polish experience and involvement in the transfer of transmission operations to GAZ-SYSTEM, he said the steps taken by Moldova to apply EU rules even in the face of major Russian opposition and to enact much-needed reform drew on Poland's hard-learnt lessons in dealing with Russia's Gazprom over the years.

Although the cold months of 2023/24 and the first half of 2024 were relatively uneventful, the situation became more dramatic towards the end of the year, as Moldova was facing new supply crises on both banks of the River Nistru.

On the one hand, Moldovagaz, Energocom and the ministry of energy became involved in a power struggle which jeopardised supply security on the Right Bank. The incumbent and state wholesaler were complaining about government interference in their purchasing strategies while the former minister of energy insisted he could not trust Energocom or Moldovagaz.

The crisis reached a tipping point in the final weeks of 2024 when the then minister of energy, Victor Parlicov, travelled to St Petersburg to discuss gas supplies and the replacement of the Moldovagaz board with the company's main shareholder, Gazprom.

Returning empty-handed and facing severe criticism for travelling to Russia, Parlicov saw his ministerial career come to an abrupt end, as prime minister Dorin Recean decided to dismiss him along with the acting CEO of Energocom, Victor Bînzari and Moldovagaz supervisory board member Sergiu Tofilat.

Although Moldovagaz secured the necessary supplies for winter delivery to right bank consumers in the final days of December 2024, it became increasingly obvious that Russia was preparing to cause a humanitarian crisis in Russian-speaking Transnistria.

The province had historically depended on Russian gas supplied via Ukraine but with the expiry of a historical agreement on 1 January 2025 and Kyiv's refusal to renew it, Gazprom declined to make alternative arrangements, stopping all exports, instead.

The local population survived a full month without heating and only with limited electricity and water supplies before Transnistrian authorities accepted an EU offer to deliver gas on a humanitarian basis.

Although the offer was short-lived, as Tiraspol opted for an alternative, albeit temporary, Russian-backed arrangement, it gave the local population the opportunity to see there are other solutions than continuous dependence on Russia.

Artur Lorkowski, director of the Energy Community, said the experience also forced the EU and Moldovan policymakers to step out of their comfort zone and show that Transnistria and Moldova have other options that can be more sustainable in the long-term.[12]

USD 709M
Gazprom debt debunked

An independent 2023 audit by UK & Norwegian experts disproved Russia's debt claims.

Moldova unbundles gas transmission

In a bold move, control was shifted to Vestmoldtransgaz, ending decades of Gazprom dominance.

Fast-track to EU

Moldova gained EU candidate status in 2022 and launched accession talks by June 2024.

2025
Transnistria faced freezing January

In 2025, the region went a full month without heating as Gazprom halted supplies — EU offered emergency gas.

Race to end dependence

Moldova is accelerating interconnection and domestic energy **projects to escape reliance on Russia and Transnistria.**

Although Moldova itself no longer depends on Russia for gas supplies, the Left Bank does.

As the experience of winter 2024/25 showed, the interruption in gas deliveries to Transnistria indirectly affected Moldova, because it could no longer buy electricity produced here and had to make risky arrangements to guarantee uninterrupted access to supply.

It is for this reason, that Moldova is now racing against time to complete its interconnection projects with Romania and deploy its own production capacity that would ultimately remove its dependence on Transnistria and indirectly Russia.[13]

On the political front, Moldova has also made significant progress, having become a candidate EU member and having pledged to transpose the EU's acquis, including all rules related to energy, into its legislation.

Diana Jabłońska from DG NEAR noted the speedy pace at which Moldova moved on the EU path thanks to keen desire on both sides to collaborate.

The country applied for EU membership in March 2022. In June 2022, the European Commission issued its opinion on the country's EU membership application, recommending candidate status on the understanding that Moldova fulfilled certain conditions. Shortly afterwards, in that month, the European Council granted candidate status and in November 2023, the European Commission recommended opening accession negotiations for Moldova. By 25 June 2024, the first intergovernmental conference opening accession negotiations was held, kickstarting the screening process for Moldova.

Nevertheless, Moldova remains vulnerable to Russian blackmail and sabotage, with Russian-sponsored groups mounting widespread disinformation campaigns about impending gas crises and rising costs to undermine confidence in the pro-EU leadership.[14]

In mid-October, Moldova held a referendum, which resulted in a razor-thin majority for changing the constitution to prepare the country for EU membership while President Maia Sandu had to fight a tough battle to win a second term amid widespread Russian interference.[15]

4 May 2022, Chisinau, Republic of Moldova. From left to right, Energy Community Director Artur Lorkowski, Moldovan president Maia Sandu, former Energy Community deputy director Dirk Buschle

But Moldova's battle is far from over.

It faces make-or-break parliamentary elections in 2025 and the outcome will, no doubt, determine whether the country remains committed to its EU integration path.

Global geopolitical volatility, the ongoing war in Ukraine and regional instability are also major risk factors that will ultimately determine whether Moldova can pursue its EU integration path or not.

Artur Lorkowski believes the changes that have been put in place so far are dictating an unequivocal direction towards moving away from on Russian gas.

A representative of DG ENEST was also optimistic, emphasising the EU's strong strategic considerations in bringing Moldova closer.[16] If Moldova succeeds in integrating with the EU, it will send a powerful message to other candidate states that the EU model remains a desirable option to be followed in the years to come.

Notwithstanding all the achievements to date, the Moldovan gas and electricity markets remain imperfect, and the country still needs to continue reforms to open its gas and power sectors, couple up with EU electricity markets and become a full ENTSO-E member. In hindsight, however, there are several undisputed gains.

Firstly, the country has managed to overcome an ingrained apprehension of Gazprom, which prevented decision makers from taking a resolute stance in the defence of national interests. Nearly all foreign participants interviewed for this study sensed the fear instilled by Moscow before and after independence.

That fear

has now dissipated and Moldovans can look with more confidence to the future.

Secondly, although gaining access to energy resources had been the root cause of many problems experienced by Moldova in the last three decades, its importance has only just been recognised by establishing a dedicated Ministry of Energy. Denis Tumuruc, energy expert at the Energy Community and former government official, recalled how during his time in government fewer than a dozen people were hired to handle energy-related issues. Now, the Ministry of Energy has over 70 employees, including 40 who actively work on a wide range of topics from energy security to the energy transition.[17]

Thirdly, the energy crisis forced Moldova to emerge from its deep isolation, work closely with the Energy Community in transposing and implementing EU regulations and reach out to neighbouring European countries. Numerous interviewees recalled the support and goodwill Moldova received from its immediate neighbours, with some Ukrainian officials even risking their professional positions to help Moldova in time of crisis and Romanian institutions doing their utmost to fast-track processes in order to be of assistance.

EU and Energy Community officials, traders and international institutions understood the extreme circumstances the country was battling, extending a helping hand when it was most needed.

The EU's Diana Jabłońska recalled how Moldova had won the hearts of EU partners, who were moved by its extreme circumstances but also inspired by its desire to change its path and align with European norms.

In many ways, Jabłońska said, Moldova's story is not only a story of resilience but also a story of European solidarity where partners stood ready to stretch out a helping hand.[18]

Within four years, Moldova has increased its international engagement to draw widespread support. More and more countries, including many who had never had historical ties with Moldova, are now opening embassies in Chișinău.[19]

The Moldova Support Platform, an initiative of Romania, France and Germany designed to attract international assistance, including in the energy sector, now includes over 30 countries and dozens of international organisations.[20]

Those bonds are unlikely to disappear, but interviewees said Moldova also needs to remain committed to inspiring trust in its actions. Its security challenges are numerous and the emergence of free markets like those operating on western European markets may still be a long way away.

Apart from acknowledging the great strides made by Moldova in a short period of time, this study also reveals a critical finding: the absence of long-overdue structural reform increased Moldova's vulnerability to blackmail, bringing it dangerously close to political and economic upheaval.

It was only when Moldova began to work closely with the Energy Community and take its market commitments in earnest that it could diversify resources and pursue bolder steps towards limiting its dependence on Russian-controlled supply as described in depth throughout the following chapters.

The study

was commissioned by the Energy Community but the stories and views put across here are those of a variety of stakeholders who were first-hand witnesses of the events that unfolded from 2021 up to the completion of the report in the first half of 2025.

The first chapter provides much-needed background for those less familiar with the Moldovan energy sector, aiming to set the scene for the ensuing narrative.

Chapters two and three focus on the first energy crisis and its immediate aftermath and cover the period from October 2021 to October 2022.

Those chapters cover the spring and summer months of 2022.

Chapter four outlines the steps pursued by Ukraine together with Moldova to unplug from the Russian and Belarusian electricity grids to which they had been connected since Soviet times and synchronise with the European system operating under the ENTSO-E umbrella. It also discusses Moldova's overdue efforts to switch to its electricity balancing market. The chapter covers the spring and summer months of 2022.

Chapters five and six describe Moldova's winter preparations, including the government's negotiations to secure an EBRD revolving credit line, the consolidation of the state wholesaler Energocom, its regional expansion and the onset of a new energy crisis caused by limited Russian gas supply and the suspension of electricity deliveries from Transnistria. The chapters cover the months spanning spring 2022 and the beginning of 2023.

Chapter seven looks exclusively at the unbundling and certification of the Moldovan electricity and gas grid operators in 2023.

Chapter eight describes the introduction of backhaul operations in Moldova, as well as the country's delays in implementing the EU's network codes and the impact of tariff regulations introduced on the market in 2023.

Chapter nine describes a power struggle between Moldovagaz, Energocom and the ministry of energy that brought the country close to a major crisis just as Russia was preparing to create a humanitarian disaster in Transnistria, cutting vital energy supplies during winter months. It also shows how the EU made history by winning a race against Moscow in securing funding to buy gas to ensure Transnistria's population could access life-saving heating and electricity supplies as temperatures were plunging below zero.

The final chapter sums up the discussion and adds a few remarks related to Moldova's future challenges including upcoming parliamentary elections and the Right Bank's chances of settling its long-running gas debt following the publication of an independent international audit in 2023.

This study relied on interviews conducted throughout 2024 and 2025, with more than 40 Moldovan and foreign stakeholders who had witnessed up close the country's efforts to overcome challenges and introduce much-needed change.

Most of them discussed issues on the record, others preferred to remain anonymous. Some of the European partners who were called to lend support in the very tough days of October 2021 spoke fondly and movingly about the people they befriended during their spell in Chișinău.

Since Russia's Gazprom and InterRAO, the company operating the Transnistrian MGRES power plant, take up a large part of the narrative, the author invited representatives from both to put across their arguments. Nevertheless, neither responded to the invitation.

Invitations to take part in interviews were also extended to Vestmoldtransgaz (VMTG), Romania's gas and electricity grid operators Transgaz and Transelectrica and Moldova's former minister for infrastructure and regional development, Andrei Spînu. However, the author did not receive any answers.

Nevertheless, the lack of responses from a number of stakeholders does not detract from the contributions made by those who agreed to talk and who provided their valuable insights and recollection of events, helping this study to shed new light on a complex but fascinating part of Europe.

Special thanks therefore go to Mr Ion Andronic (Ministry of Energy, Moldova), Professor Valentin Arion (Moldova), Mr Victor Bînzari (ex-Energocom), Mr Eugeniu Bot (Energocom), Mr Eugeniu Buzatu (Energocom), Mr Constantin Borosan (Ministry of Energy, Moldova), Dr Dirk Buschle (ex-Energy Community Secretariat), Mr Iurie Cazacu (Moldelectrica), Mr Vadim Ceban (Moldovagaz), Mr Dan Chiviriga (MESA, USAID), Mr Octavian Ciobîrcă (Moldelectrica), Mr Willem Coppoolse (ERU, Ukraine), Mr Octavian Costas (EBRD), Mr Predrag Grujičić (Energy Community Secretariat), Mr Lucian Indrieş (C4G USAID), Mr Igor Iurco (Customs Office, Moldova), Ms Diana Jabłońska (DG Neighbourhood and Enlargement Negotiations, EU), Mr Sergiu Lica (Energocom), Mr Ion Lupulescu (BRM Est), Mr Sergiy Makogon (ex GTSOU, Ukraine), Mr Mark Lane (EBRD), Mr Antonio Albino Marques (ENTSO-E), Ms Branislava Marsenic Maksimovic (Energy Community Secretariat), Ms Smaranda Miron (Energy Community Secretariat), Mr Călin Negură (former Moldovan government official), Mr Victor Parlicov (minister of energy 2023-2024), Mr Adrian Pritula (ex Energocom), Mr Andrii Prokofiev (GTSOU, Ukraine), Professor Alan Riley (commissioned by EU), Mr Ion Sturza (prime minister of Moldova, 1999), Mr Nikolaos Tourlis (MESA, USAID), Mr Alexandru Săndulescu (EU High-Level Advisers Mission to Moldova), Mr Sergiu Tofilat (former Moldovagaz supervisory board member and senior energy expert), Mr Iacob Timciuc (Moldovan minister of energy 2001-2005) Ms Mariia Tsaturian (ex Ukrenergo, Ukraine), Mr Alexandru Ursu (ANRE, Moldova), Mr Arcadie Vicol (Natural Gaz D.C. Moldova), Mr Gregor Weinzettel (Energy Community Secretariat), Mr Maciej Woźniak (EU senior non-key expert to Energocom), Mr Torsten Wöllert (EU).

The author wishes to thank representatives of various departments in the European Commission who provided information for this study but preferred to remain anonymous.

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Importantly, I wish to extend my gratitude to the Energy Community and its director Mr Artur Lorkowski for sharing his first-hand experience of the events that marked Moldova's arduous journey towards aligning with EU rules and for challenging me to write this study.

Finally, I wish to acknowledge and thank my employer, ICIS, for the permission to carry out this research and refer to some of its proprietary data.

Aura Sabadus
London, 2025

Consult this chapter endnotes at page 194.

CHAPTER 1

A complicated past

The decade following the collapse of communism and the Soviet Union from 1989 to 1991 was a profoundly painful period for all the countries of the eastern bloc, as they underwent some of the most dramatic transformations in modern history,[1] switching from centralised economies to deregulation and privatisation.

However, for the Republic of Moldova this decade was particularly traumatic, not only because it witnessed a catastrophic economic decline, with its GDP collapsing by 66%[2] during that time, but also because it faced a war against separatist Transnistrian forces, supported by elements of the Russian 14th Army, which erupted shortly after independence.

Moldova declared its independence from the Soviet Union on 27 August 1991, but its intricate ties with Moscow arguably only began to unravel in earnest in the menacing shadow of Russia's full-scale invasion of Ukraine 31 years later.

Some of those ties had been based on economic interests and were cemented by large-scale infrastructure projects, such as natural gas pipelines or electricity transmission cables, which had been constructed prior to independence but continued to keep resource-poor Moldova reliant on energy imports from former Soviet regions long after the union collapsed.

Others were rooted in human networks entrenched along political, cultural and linguistic lines during the Soviet era, making it extremely challenging for the emerging ruling elite to free itself from the Kremlin's sphere of influence and forge a sovereign vision for the future.

All this meant that, by the end of the 1990s, Moldova had become one of Europe's poorest countries, laden with mounting debt, facing alarming levels of corruption and still heavily under Russian control.

Many of its crippling difficulties arguably stemmed from the mismanagement and depredation of the energy sector, which undermined Moldova's security and left it exposed to the Kremlin's blackmail and intimidation.

The energy sector and, in particular, the gas industry became major sources of corruption, leaving the country vulnerable to Russian political bullying and exposing it to considerable security risks.

Deregulation of the energy sector was the standard solution prescribed in the 1990s by international financial institutions to countries struggling with economic inefficiencies or transiting from centralised economic models to free markets following the collapse of communism.

In that regard, Moldova was no exception, being advised by the World Bank and the International Monetary Fund to follow the same well-trodden path taken by other countries in the region, namely to unbundle vertically integrated incumbents, privatise state-owned assets, encourage competition and investments and empower consumers to choose suppliers.

On the electricity market, in 1997, the government proposed the unbundling of incumbent Moldenergo into four groups responsible for production, transmission, retail and distribution.

The generation segment was further split into six heating, hydro and thermal units[3] with a total installed capacity of close to 3GW and was earmarked for privatisation at a later stage.

Transmission operations were placed under the umbrella of an independent state-owned company, initially called Moldtranselectro but renamed Moldelectrica, in 2000, while distribution assets were unbundled into five units, namely RED-Nord, RED Nord-Vest, RED-Centru, RED-Chișinău and RED-Sud.

In the gas sector, matters were more complicated, taking a tortuous path over the next three decades and hindering Moldova from pursuing reform in earnest.

In 1992, Moldova nationalised four natural gas trunklines, including three forming part of the major Trans-Balkan corridor linking Russia to the Balkans and Turkey. The four lines crossing the two sides of the River Nistru had been operated in Soviet times by Prikarpattransgaz.

Following independence, Moldova began to accumulate debt for gas imports as Russia more than doubled the cost of gas imported in the early 1990s, leaving the country struggling to clear outstanding payments. As a result, in 1995 the authorities decided to pursue a debt-to-equity swap, transferring the trunklines to Gazsnabtranzit, a Moldovan–Russian enterprise in which the Russian producer Gazprom would hold a 50% stake.

A year earlier, in 1994, the government had established the state-owned enterprise (SoE) Moldova-Gaz, a holding company responsible for the supply and distribution of gas to domestic consumers and including 51 independent but affiliated companies, which were corporatised a year later.

By the end of the decade, as Moldova's debt for imported Russian gas exceeded USD 500 million, authorities decided to merge SoE Moldova-Gaz and Gazsnabtranzit into a vertically integrated Moldovan–Russian joint-stock company Moldovagaz, effectively placing not only transmission but also distribution assets under Russian control.

In hindsight,

the reform process was complicated by a multitude of factors, including war, corruption, incompetence and political blackmail, which led to the impoverishment of the population, sapped the country of its resources and left it fully exposed to Russian interference.

It would not be an exaggeration to argue that, over the years, the energy sector became Moldova's single greatest vulnerability. However, the errors that were made need to be viewed in the wider economic, political and social context since the country's independence in 1991.

BACKGROUND

In the early 1990s, Moldova was hit by internal and external shocks, with profoundly detrimental implications for its economy, politics and wider society.

The transition from a centralised economy to free market arrangements immediately after independence coincided with a collapse in agricultural and industrial output.

During the Soviet era, Moldova was a centre of industrial production, accounting for 60% of its economy in the early 1990s.[4] It was also an electronics powerhouse, ranking as the third-largest supplier of electronic equipment among the Soviet republics.[5]

Nevertheless, with the dissolution of the Soviet Union, much of that industrial base unravelled, as did traditional trade relations with other Soviet states.

The effects of collapsing industrial output and trade relations were compounded by droughts in 1992 and 1994, causing the country's real GDP to fall by more than 50% between 1991 and 1994 and annual inflation to peak at 2,200% in 1992.[6]

Furthermore, Moldova was also confronted with the outbreak of war against separatist Transnistrian forces, supported by Russia's 14th Army.

Before the Soviet occupation, the Bessarabian area of Moldova, namely the strip of land situated to the west of the River Nistru, had been part of Romania between 1918 and1940.

Today's Transnistria formed part of the Ukrainian Soviet Socialist Republic (SSR), but was organised as an autonomous republic called the Moldavian Autonomous Soviet Socialist Republic (ASSR), with Tiraspol as its capital.

After 1940, the two banks of the River Nistru were merged into the Moldavian SSR. The occupied Romanian-speaking territory was subjected to an intense policy of Russification and isolation from the Romanian cultural sphere.

Four decades later, Mikhail Gorbachev's policies of perestroika and glasnost in the late 1980s ushered in a period of political pluralism at the regional level, which arguably inspired nationalist movements in satellite states and the desire to leave the Soviet Union.

The period leading up to independence saw the emergence of tensions within the Moldovan population, which was still largely composed of Romanian speakers living on the right bank of the River Nistru and Russian-speaking Transnistrians living on the left bank.

Around that time, tensions escalated into secessionist movements in the southern Turkic-speaking Gagauzia and the north-eastern Transnistrian region, which declared itself the Pridnestrovian[7] Moldavian Soviet Socialist Republic in September 1990.

When the Moldovan Parliament adopted the Declaration of Independence of the Republic of Moldova in August 1991 and declared the 1939 Ribbentrop-Molotov Pact "null and void", leading to the establishment of the Moldovan SSR, the Transnistrian authorities interpreted this as dissolution of the 1940 merger. With Russian support, they took steps to assert sovereignty over the entire territory of the former Moldovan SSR.

300 killed,
400 wounded

The 1992 war between Moldova and pro-Russian separatists caused heavy casualties before the ceasefire.

Russian 14th Army intervenes

Russian troops tipped the balance in favour of Transnistrian rebels during the 1992 conflict.

2.5 GW
dependency

Post-war Moldova became reliant on the Russian-controlled MGRES power plant in Transnistria for most of its electricity.

10 years
9 governments

Between 1991 and 2001, Moldova faced major political instability with nine different governments.

Energy as a weapon

Russia used gas and electricity to fuel corruption and keep Moldova under geopolitical control.

Although the first fatalities in the new conflict were recorded in November 1990, two months after the declaration of the Pridnestrovian Moldavian Soviet Socialist Republic, military action escalated in March 1992.

Fighting erupted after pro-Russian Transnistrian militias killed Moldovan police officers in Dubăsari, a city lying on the River Nistru, on 1 March 1992.

Moldovan troops responded and defeated the pro-Russian Transnistrian rebels, but shortly after, Russian soldiers from the Russian 14th Army intervened, tipping the balance in favour of the rebels.[8]

The Moldovan Parliament called on the Kremlin to end the illegal occupation of the newly independent Republic of Moldova and withdraw Russian troops from its territory.

A ceasefire agreement was signed on 21 July 1992 but by then around 300 Moldovans had been killed and nearly 400 wounded.[9]

Despite the ceasefire, the hostilities are merely frozen, as Russian soldiers remain stationed in Transnistria and the province has been largely under Russian influence ever since.

Some political observers suggested that the conflict had erupted along ethnic and linguistic lines, as the Russian-speaking population of Transnistria feared losing their rights if Moldova pushed for reunification with Romania.[10]

Others, however, including interviewees for this study, insisted the war was political and supported by Russia, which sought to retain control over its former republic.[11]

Over the ensuing three decades, Russia used Moldova's electricity and gas sectors not only to deepen the latter's dependence on imported fossil fuels, but also to prop up the separatist regime in Transnistria and ensure Moldova would not stand a chance of severing all links with the old hegemon.

Although the war remains frozen and Transnistria is not internationally recognised as an independent republic, the implications have been long-lasting, affecting Moldova's political and economic evolution and leading to major, still ongoing challenges for the country, primarily in the energy sector.

One of the consequences was the political instability that plagued the country in the years following independence.

Between 1991 and 2001, Moldova had no fewer than nine governments.[12] Admittedly, the political unpredictability was the result of numerous factors, including the transition from a centralised economy to free market arrangements, accompanied by a sharp economic decline and falling real wages.

Nevertheless, the transition period also gave rise to corruption, which Russia significantly encouraged as a means of destabilising Moldova and keeping it under control.[13] One of the principal instruments of influence has been the energy sector.

As a small landlocked country with a population of close to four million in the early 1990s,[14] Moldova has historically depended on Russian imports for all its gas consumption and on supply delivered from the Russian-controlled 2.5 gigawatt (GW) MGRES thermal power plant in Dnestrovsk, Transnistria[15] for most of its electricity needs.

When the war ended in 1992, Moldova found itself dependent on a hostile Moscow-controlled province for the bulk of its electricity supply, while being fully reliant on Russia for its gas imports.

In fact, Russia exploited these vulnerabilities, ensuring that the country remains poor and dysfunctional by exhausting its resources, corrupting and blackmailing its ruling elites and stoking instability.

Over the past three decades, Russia appropriated the country's gas transmission and distribution assets, while also pushing the incumbent Moldovagaz to accumulate corporate debt amounting to USD 10 billion, most of which was accrued for deliveries of gas to Transnistria.

RUSSIA, TRANSNISTRIA AND MOLDOVA'S GAS DEBT

More than a year after the ceasefire agreement was signed, Russian gas producer Gazprom concluded a supply contract with Moldova.

The conditions were so onerous that it was evident from the outset that Moldova would struggle to meet them and pay for the supplies, given the country was facing collapsing industrial production and a sharp decline in its annual GDP.

Gazprom increased gas import prices by 108% from USD 38.50/1,000 m^3 to USD 80.00/1,000 m^3 and buyers were asked to pay in advance. Failure to pay would attract a 0.35% penalty for each day of missed payment, or 128% annually.

Russia ensured the price was the highest paid by any former Soviet state, being on average USD 8.00/1,000 m^3 more expensive than the average price paid by EU countries[16] and around USD 30.00/1,000 m^3 higher[17] than the price paid by members of the Commonwealth of Independent States (CIS).[18]

Although the volumes imported by Moldova were relatively small compared to those imported by other regional countries—around 1 billion cubic metres (bcm) for its own needs and another 1.8–2 bcm for Transnistria—the country did not have any other sources of supply and was fully dependent on Russia for meeting its domestic consumption.

This meant that while Moldova's debt to Gazprom stood at USD 22.2 million in January 1994, when the first volumes under the new contractual terms were delivered, by the end of that year it had risen to USD 290.8 million, including USD 99.9 million for non-payment of penalties and Transnistria's USD 91 million debt.[19]

To clear some of the arrears, authorities decided to carry out a debt-to-equity swap and transfer the gas transmission assets to a newly formed Moldovan–Russian company, Gazsnabtranzit, in which Gazprom would hold a 50% majority stake, the separatist authorities would hold 11% and Moldova would hold the remaining 39%.

Following the 1992 ceasefire agreement, part of the transmission assets that had belonged to Prikarpattransgaz during Soviet times and covered over 542.9 km reportedly came under the control of Tiraspoltransgaz, a Transnistrian municipal enterprise.[20]

Figure 1. The natural gas transmission system in the Republic of Moldova
Source: ENTSOG.

One of those lines, the Ananiiv–Cernăuți–Bohorodchany (ACB) line, extends over 199.8 km, of which only 15 km is located in Transnistria.

Meanwhile, the ATI (Ananiiv–Tiraspol–Izmail), SKDRI (Sebelevka–Donetsk–Kryvyi Rih-Izmail) and RI (Razdelnoe–Izmail) lines, the three pipeline segments included in the Trans-Balkan transit corridor, cover a distance of 343.1 km, of which 96.2 km is located on the left bank of the River Nistru.

Up until 2020,

the Trans-Balkan corridor facilitated the annual transit of up to 25bcm of Russian gas to Turkey and the Balkans via Ukraine, Moldova and Romania.

In a study published in 2007, energy expert Victor Parlicov and former deputy president of Moldova's Court of Accounts Tudor Șoitu claim Tiraspoltransgaz had never submitted any documents showing how part of the assets had been transferred to it, adding that the value assigned to the transferred assets at the time cannot be verified.[21]

When the state decided to carry out the debt-to-equity swap, only the value of the ACB trunkline was assessed, while the other three lines were not included in the new company's overall capital because they had not been recorded in the state property register since the country's independence.

According to legal arrangements, assets transferred to joint ventures including foreign partners were supposed to be assessed at international market values, but this did not occur.[22]

In the 2020 study, Tofilat and Șoitu estimated that the total asset value transferred to Gazsnabtranzit should have been USD 936 million, meaning that Gazprom would have received USD 468 million through its 50% stake.[23]

However, the value of the transferred assets declared at the time was USD 104 million, around nine times less than the value assessed by the two Moldovan experts.

Following the asset transfer conducted as part of the agreement to clear the debt, Gazprom received only USD 52 million through its 50% stake in Gazsnabtranzit, helping to clear only a fifth of the outstanding USD 290.8 million debt at the end of 1994.

Tofilat and Șoitu, however, claim that Moldova was deprived of USD 416 million due to undervaluation of the transmission assets.

Furthermore, they point out that the documents submitted by the Transnistrian side showing the valuation of transmission assets used on the Left Bank were false. The authors argue that Transnistrian officials actually claimed control of transmission assets that were in fact under Moldovan control.[24]

The authors note in the same study that Gazsnabtranzit may have been illegally established, as the legal records documenting the establishment of the company were never published in the Official Gazette.

The saga, however, continued in the following years, as the debt incurred by the Right Bank kept growing, reaching nearly half a billion US dollars by 1998.

Of the total, USD 361.6 million was the outstanding debt for gas imports, while the remaining USD 149.2 million constituted penalties.

To clear some of the arrears, the authorities followed the same tactic as in 1995, offering to transfer distribution assets controlled at the time by SoE Moldova-Gaz and merge that company with Gazsnabtranzit into a vertically integrated entity, JSC Moldovagaz.

The newly formed company had working capital of USD 290 million, with a 50% stake transferred to Gazprom. The Moldovan government kept a 35.3% share, while the separatist authorities held a 13.4% stake. The remaining 1.3% was transferred to some of the company's personnel.[25]

In 1997, Moldova resorted to barters to raise USD 87 million to pay off its debt for 1994.

In a written note,[26] Tofilat stated that when JSC Moldovagaz was established, assets should have been assessed at a preliminary value, to be adjusted in the following year in line with market values. That adjusted value would have been critical in determining by how much Moldova's debt to Gazprom would have been reduced.

Moldova expected to clear USD 59.9 million of its outstanding gas debt through the asset transfer to Gazprom's 50% stake in Moldovagaz carried out in 1998. Nevertheless, Tofilat pointed out that in reality Gazprom had used the asset transfer to clear Transnistria's debt but not Moldova's.

Apart from the fact that Moldova was deprived of its strategic assets, Gazprom also took advantage of its extreme difficulties in raising funds to clear the arrears, using those assets on behalf of Transnistria rather than Moldova itself.

In 1997 and later in 2000, the Moldovan government issued a number of bonds to raise cash to pay off arrears dating back to 1995 and 1997. Nevertheless, Gazprom used part of the funds to clear Transnistria's debt, even though the money had been raised by Moldova to clear its own outstanding payments, according to Tofilat.

In addition to the skewed asset transfers and the damage caused to Moldova, the country was also grappling with rampant corruption, further deepening Moldova's debt to Russia.

In the 2020 study, Tofilat and Șoitu, show how companies controlled by Veaceslav Platon, a Moldovan individual whose name was associated with the "Moldovan laundromat", through which as much as USD 20.8 billion was whitewashed via Moldovan and Latvian banks,[27] were allegedly consuming gas without paying for it, under a controversial court decision.[28] As a result, Moldovagaz may have accrued an additional USD 5 million debt due to non-payment by companies or individuals associated with Platon.[29]

Furthermore, an investigation carried out by Watchdog.Md, a Moldovan civil-society think tank, showed in 2019 that at least Moldovan Lei (MDL) 435 million (USD 25 million) in company funds may have been embezzled.[30]

Another important fact highlighted by the two authors relates to the contractual terms embedded in a 2006 agreement signed with Gazprom and repeatedly amended. Under this agreement, Moldovagaz is obliged to deliver gas to Transnistria and accumulate debt on its behalf. The Russian producer does not hold a supply agreement with Tiraspoltransgaz and Moldovagaz could stop deliveries without Gazprom's written consent.[31]

The money paid by Transnistrian consumers had been collected in a "special fund" since 2007, which, according to the authors, may have been used to underwrite the separatist authorities on the left bank of the Nistru.[32]

In fact, in another report published in 2017, Parlicov, Șoitu and Tofilat, explain in detail how the gas supplied by Gazprom is delivered by Moldovagaz to Tiraspoltransgaz, which sells it on to local consumers at discounted prices set by the Transnistrian authorities.[33] The collected revenue, however, is paid into the local separatist budget, according to the authors.

Within a ten-year period (2007-2016), USD 1.27 billion was paid into the separatist budget of the region, which had a population of less than 500,000 at the time; indeed, the sum exceeded its GDP.[34]

Tofilat and Șoitu note that despite the mounting debt accumulated by Transnistria over the last three decades, Gazprom continued to supply gas. The USD 10 billion gas debt is a corporate obligation of JSC Moldovagaz, secured by its assets worth USD 0.7 billion, of which a 50% share already belongs to Gazprom.[35]

This may back up arguments that the Russian state-owned producer was not driven by commercial interests in engaging with the Transnistrian authorities but was primarily concerned with supporting the separatist regime, Tofilat said.

Parlicov and Tofilat estimated that the total costs incurred by Gazprom over 27 years to finance Transnistrian separatism amounted to USD 3 billion, of which USD 2 billion was recovered by the Russian corporations InterRAO and Metalloinvest, which controlled energy and steel companies in the Transnistrian region and benefited from subsidised gas prices.[36] In other words, Russia has spent at most USD 1 billion on maintaining its influence in Moldova over 27 years.[37]

Tofilat and Șoitu conclude that although three of the four gas trunklines had been used for the transit of gas from Russia to the Balkans and Turkey, Moldova was once again short-changed in favour of Transnistria.

The authors note that the transit revenue should have been split 72% in favour of Moldova and 28% for Transnistria to reflect the length of the pipelines running through the respective banks of the River Nistru.

Nevertheless, the 2006 contractual terms in fact stipulate that the transit revenue should be split 50–50, even though the transit lines covered a longer distance in Moldova than in Transnistria.

As a result, Moldova may have lost USD 250 million over a 20-year period.[38]

By January 2024, Moldovagaz acknowledged that the debt incurred on behalf of Transnistria had exceeded USD 10 billion.[39]

Nevertheless, Moldovan authorities disputed Gazprom's claims that Moldovagaz owed USD 709 million for gas consumed on the right bank of the Nistru, stating that they recognised only USD 8.6 million of the total debt accumulated over the years.[40]

The author invited Gazprom to comment on Moldovagaz' long-running debt saga but received no response.

DEBT, SEPARATISM AND REFORM

Moldova's outstanding debt to Gazprom has been one of its greatest obstacles to reforming the natural gas and electricity sectors, with the Russian producer specifically making implementation of the Third Energy Package conditional in intergovernmental Moldovan–Russian[41] protocols on the country's repayment of the gas debt.[42]

It has also acted as a brake on Moldova's efforts to align with European market rules following its decision to become a Contracting Party of the Energy Community, an EU-affiliated international institution aiming to extend the EU internal energy market to neighbouring southeast European countries.

Gazprom repeatedly used Moldova's outstanding debt either as a pretext to hinder it from pursuing reform or as a form of blackmail to co-opt the loyalty of its political elites.

In November 2022, Moldova took an important step, publishing an official audit by the Court of Auditors.[43]

The report highlights some of the key problems that had led to the accumulation of debt, including failure to value Moldova's assets transferred to Gazsnabtranzit and Moldovagaz in line with internal market standards. It also points out that the faulty asset valuation carried out in the 1990s meant that Moldova's debt was not proportionately cancelled. The report also notes that some of the funds held by Moldovagaz had been embezzled.[44]

Nevertheless, the report falls short of highlighting the profoundly harmful consequences of the complex gas scheme put in place by Gazprom in the early 1990s.

A year later,

in June 2023, Norway-based lawyers Wikborg Rein Advokatfirma and British consultants Forensic Risk Alliance published an independent audit commissioned by the government the year before.

The audit confirms many of the findings highlighted by Parlicov, Șoitu and Tofilat in their previous studies, noting illegalities and irregularities in the founding of Moldovagaz and its predecessor Gazsnabtranzit, as assets were estimated "contrary to the prevailing laws of Moldova" and were undervalued as a result.

It also notes that Gazprom imposed excessive penalties for non-payment, causing the debt to balloon over the years, yet did not take steps to recover it.

6x cheaper gas for Transnistria

In 2014, while Moldovans paid USD 334.50 per 1,000 m^3, Transnistrians paid as little as USD 50—one-sixth the price.

2.5 GW power for others

The MGRES thermal plant in Transnistria was supplied by Russian gas transiting Moldova.

2 audits in 12 months

The Court of Auditors (2022) and Wikborg Rein + Forensic Risk Alliance (2023) exposed systemic fraud, undervalued assets, and uncollected penalties.

The gas scheme put in place from the 1990s onwards helped to finance the secessionist Transnistrian authorities and stoked political instability, leaving Moldova in a highly vulnerable position.

More worryingly still, the scheme was conceived in such a way that Moldovagaz was forced to deliver gas to a region that is not recognised internationally.[45]

Secondly, the scheme fostered widespread corruption on both banks of the River Nistru. With more than a quarter of the population living below the poverty line, gas prices to end-consumers were capped on both sides of the Nistru. However, while Moldovan consumers were paying amounts relatively close to the import price, customers on the Left Bank were paying only a fifth or less.

For example, in 2014, the Russian gas import price hovered around USD 377.10/1,000 m^3[46] but the Moldovan average consumer tariff was MDL 4,766/1,000 m^3 (USD 334.50/1,000 m^3),[47] while the consumer tariff in Transnistria ranged between USD 50 and USD 70/1,000 m^3, depending on consumption.[48]

Even with heavy subsidies in place, some companies on both banks were reportedly receiving gas for free. That may have been the case for the companies affiliated with Veaceslav Platon discussed earlier.

In Transnistria, heavy consumers such as the 2.5 GW MGRES thermal power plant and the "Uzina Metalurgica Moldovenească" (UMM) steel plant at Rîbnița used large volumes of gas imports for the benefit of Russian consumers rather than the Moldovan population.

Parlicov, Șoitu and Tofilat show how Transnistrian authorities set a purchase tariff of USD 42.00/1,000 m^3 for UMM, which was part of the MetalloInvest holding controlled by the Russian oligarch Alisher Usmanov between 2005 and 2015. The price represented less than 12% of the import prices at the time, but even that tariff was subsequently scrapped, which means the company was well-positioned to make a significant profit considering that its production costs were almost non-existent.[49]

The authors further point out that, in 2005, Gazprom assigned the right to claim USD 1.2 billion from Moldovagaz to Factoring Finance, a subsidiary of Gazprom's daughter company Gazprominvestholding. The managing director of Gazprominvestholding at the time was Alisher Usmanov.

Gazprom effectively subsidised the cost of gas delivered to UMM, which in turn paid for the supplies at heavily subsidised tariffs. However, the funds went to the separatist budget and Moldovagaz was left with an outstanding debt to Gazprom.[50]

These schemes were carried out against the backdrop of financial difficulties, which blocked Moldova from developing its economy and upgrading its energy sector.

In the electricity sector, consumers on the right bank of the Nistru were reliant on electricity supplied by the MGRES Dnestrovsk plant in Transnistria for 70% of consumption. Only around 20% of the total electricity supply was produced in Moldova and the remaining 10% was imported from Ukraine.

Since independence, discussions had been held on building up to 800MW of new capacity in Moldova to help reduce its dependence on Transnistrian supply and Ukrainian imports. However, none of these projects came to fruition because Moldova's spiralling gas-related debt and political instability left it unable to secure long-term loans to finance them.[51]

Similarly, there were plans to build additional high-voltage interconnection lines with Romania to minimise dependence on Transnistria. Although the projects have been discussed since the 1990s,[52] they are only now advancing. The 400 kV overhead Vulcănești–Chișinău line received approval in 2021[53] and financing for the 400 kV overhead Bălți–Suceava line was secured in March 2024,[54] despite the plans having been on the discussion table since 2006.[55]

For natural gas, Moldova remained fully dependent on Russia for imports, being unable to develop storage facilities or diversify its supply until 2019, when upgrade works were carried out on the Trans-Balkan corridor, opening the possibility of securing alternative volumes from other sources.

Even though a 1.5 bcm/year interconnector with Romania was completed in 2014, the 44 km line linking Iași in Romania to Ungheni on the Moldovan border could not be used immediately because there was no supply on the Romanian side and no consumption at the delivery point on the Moldovan border.[56]

That meant it had to be extended from Iași to Lețcani in Romania and from Ungheni to Chișinău in Moldova to become commercially viable. The full Iași–Ungheni–Chișinău stretch was commissioned in 2021.

Many interviewees who were either politically active or engaged in the energy sector at the time noted the limited appetite in both Bucharest and Chișinău during the early stages to drive the project forward and to ensure real diversification of supply in Moldova.

One important achievement in the early 2000s was the expansion of the gas distribution network across the whole country, although the costs of constructing the infrastructure were primarily borne by consumers.[57]

Aside from having a tangible negative impact on Moldova's attempts to develop its physical energy infrastructure, Russia also sought to undermine the country's attempts to align with EU market rules.

In an interview for this study, former Moldovan prime minister Ion Sturza recounted how Russia expected to turn Moldova into a satellite state when Vladimir Voronin became president in 2001.

A plan designed by the Russian politician Dmitry Kozak to establish a federal state would have granted Transnistria equal status with the rest of the country, including veto power over foreign policy.

However, under both internal and external pressure, including from high-profile western figures, Voronin made a U-turn, refusing to sign the Kozak memorandum and sparking anger in the upper echelons of the Kremlin.

Sturza described the former president's decision to reject the Kozak memorandum as the moment that marked Moldova's historic turn towards Europe and led to the country becoming a Contracting Party of the Energy Community in 2010.[58]

Nevertheless, implementation of reform in the electricity and gas sector was a painful process and took at least another decade to materialise.

Both internal and external factors obstructed the process. Internally, Russia sought to delay reforms by allegedly using corrupted agents of influence to undermine the process, according to interviewees.

Externally, the solutions proposed by the international financial institutions working with Moldovan institutions to restructure the economy were too rigid and failed to take account of the country's particular circumstances.[59] This was confirmed by Professor Valentin Arion, who served as deputy minister for industry and energy until April 2000 and was also interviewed for this study.[60]

Throughout the decade from 2010 to 2020, reforms were modest as key goals such as the unbundling of transmission operations and the implementation of EU network codes were repeatedly pushed back.

Moldova's gas debt was also used as an excuse for postponing reforms.[61]

The mismanagement, corruption and errors made in the first decade after independence left Moldova with long-lasting scars, which continue to mark the country more than 30 years on.

The Russian gas scheme created head-spinning complexities, which experts are struggling to untangle to this day in an effort to ensure Moldova is no longer sucked dry of its resources.

Studies such as those by Parlicov, Șoitu and Tofilat, as well as the report published by the Court of Auditors in 2022 and the independent audit[62] carried out by Wikborg Rein Advokatfirma AS in collaboration with Forensic Risk Alliance in 2023, are helping to shed light on Russia's damaging and opaque gas scheme, which was designed to create instability and force Moldova to remain in its sphere of influence.

However, this is only the first step in a lengthy battle to clear a hefty debt, which Moldova's Right Bank authorities do not recognise, and to clarify the legal status of strategic assets. The inability to reform the energy sector, the multitude of errors made over the years—which created a dangerous dependence on Russia—and the widespread corruption that paralysed the country pushed Moldova towards a dangerous tipping point in 2021.

It took concerted and immediate action by domestic and international stakeholders to save the country from collapse, as discussed in the following chapters.

Consult this chapter endnotes at page 195.

CHAPTER 2

The first winter crisis: Russian threats, Moldovan responses

Dmitry Kozak's visit to Moldova in mid-August 2021 brought a feeling of unease.

Having been in office for less than a month, the newly installed EU-leaning government had never dealt with the powerful Russian diplomat.

However, the political and economic problems it was inheriting and was now readying itself to face were arguably tied to a fateful intervention he had made in Moldovan politics two decades earlier.

In 2003,

Kozak proposed the federalisation of the Republic of Moldova to ensure Transnistria would have equal political status with the rest of the country.

After large protests and discussions with western leaders, including a late-night call[1] from Javier Solana, the EU's representative for foreign affairs and security policy, Moldova's communist president Vladimir Voronin decided to reject the memorandum in November 2005, fearing it would jeopardise the country's sovereignty.

The snub was ill-received by the Kremlin and, allegedly, never forgotten.[2]

Within months, Russia introduced an embargo on Moldovan wine imports and increased the price of gas delivered to the country by 100%, claiming the upward adjustment was necessary to switch from a fixed price which had barely changed since 2000 to the introduction of an oil-indexed formula.[3]

The price increase caused significant economic pain and contributed to Moldova's already ballooning gas debt to Russia. Between 2006 and 2011, the gas price for Moldova increased fivefold from USD 80/1,000 m^3 to USD 400/1,000 m^3.[4]

Nevertheless, by the time the Kremlin deputy chief of staff arrived in Chișinău in August 2021 to reiterate the possibility of settling the Transnistrian issue,[5] there were signs that Moldova might be slipping away from Moscow's orbit, particularly with regard to its historic dependence on Russian gas imports.

2005

Kozak Memorandum Rejected:
Moldova backs out after EU pressure.

Kremlin response:
wine embargo
+ gas price hike.

+100%

Russian gas price to Moldova **doubled within months** of rejection.

5× Gas Price

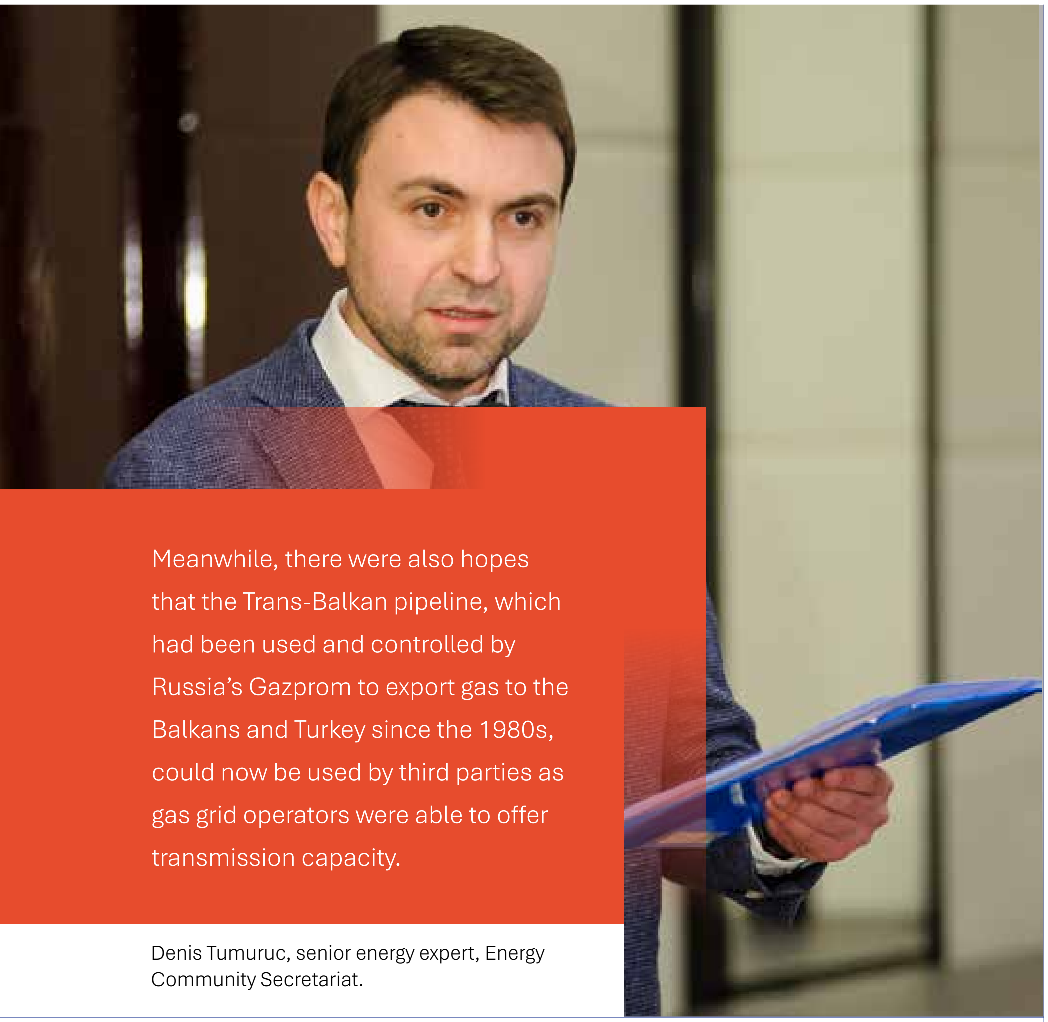
From USD 80 → USD 400 per 1,000m^3 (2006–2011) — **deepened Moldova's energy debt.**

1.5 Billion m^3

Capacity October 2021:
New gas interconnector from Romania to Chișinău completed.

First major step towards energy diversification.

A few months later, in October 2021, a 1.5 billion cubic metre gas interconnector had been expanded to ensure supply could be shipped from the Romanian–Moldovan border to the capital Chișinău, opening up a possibility for the country to buy gas from other sources.



Meanwhile, there were also hopes that the Trans-Balkan pipeline, which had been used and controlled by Russia's Gazprom to export gas to the Balkans and Turkey since the 1980s, could now be used by third parties as gas grid operators were able to offer transmission capacity.

Denis Tumuruc, senior energy expert, Energy Community Secretariat.

In July 2020, ERU, a Ukraine-based gas trading company, tested[6] the shipment of flows from the Balkans northwards for the first time ever after Gazprom diverted the historic transit to TurkStream, a newly built corridor linking Russia to Turkey via the Black Sea.

Also in 2020, the Chişinău-based management of Moldovagaz, a company majority-owned by Gazprom, approved the first ever gas injections into Ukrainian storage.[7]

The decision took the market by surprise as relations between Kyiv and Moscow had broken down following Russia's annexation of Crimea in 2014 and Gazprom subsequently asked Moldovagaz to remove stocks from Ukraine.[8]

Politically, Moldova's pro-EU Party of Action and Solidarity (PAS) was by now firmly in power as Maia Sandu, a former World Bank economist, had won presidential elections in November 2020 and PAS received a majority of the votes in snap elections a year later.

Kozak, however, was expecting to negotiate from a position of strength.

Moldova's gas supply contract, which had been renewed for only nine months in December 2020, was approaching expiry but, at the same time, winter consumption was on the rise, driven to a certain extent by demand in the agricultural sector, which had witnessed bumper crops in 2021 and which needed gas supply.[9]

Energy Community expert, Denis Tumuruc believes that Gazprom renewed the contract for only nine months in 2020 as it was anticipating that Moldova would elect a pro-EU administration the following year so the supply and price of gas would be used to undermine the incoming government.[10]

In addition, there were also expectations of higher demand in the thermal and heating sector, which consumes around 35% of gas supply, as well as among households, which account for a similar portion. The remaining 30% was split between industrial consumption and public buildings.

Gas prices on European markets had been on a steep upward trend since spring because Russia was refusing to send more supply to meet rising European demand and there were no signs of a let-up at that time.

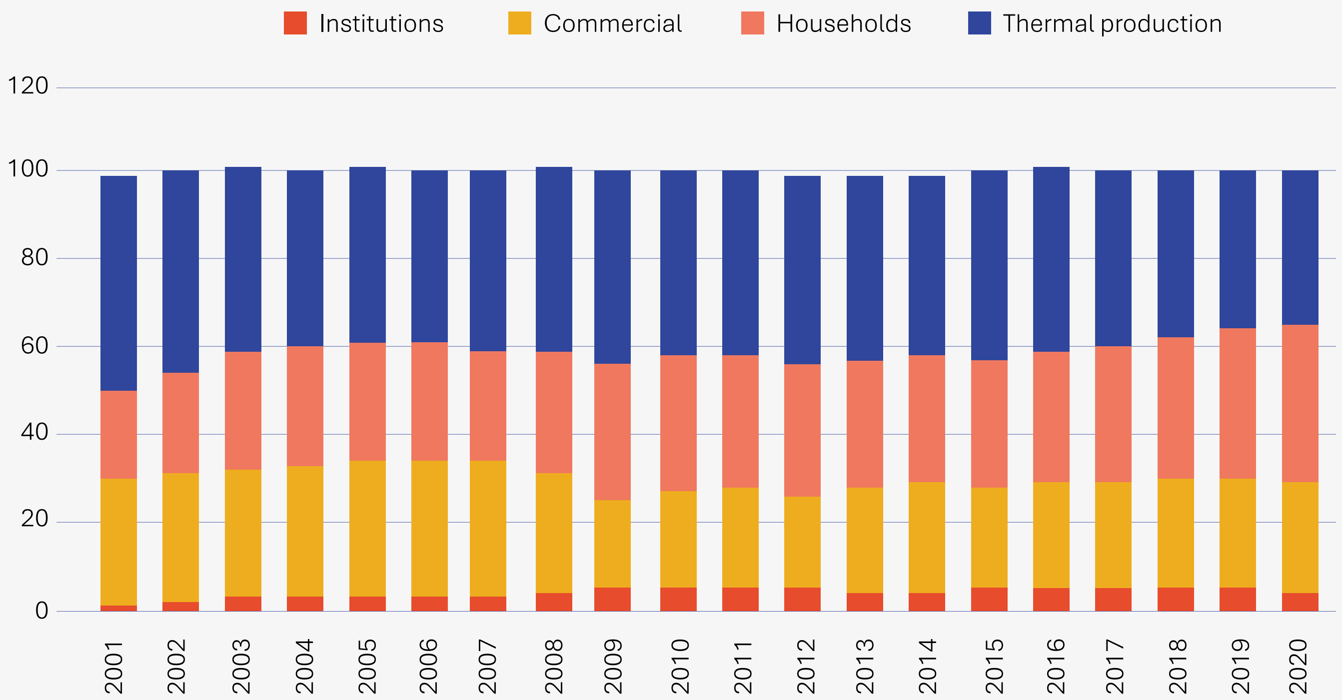


Figure 2. Structure of gas demand by sectors (as a percentage) in the Republic of Moldova

Source: ANRE.

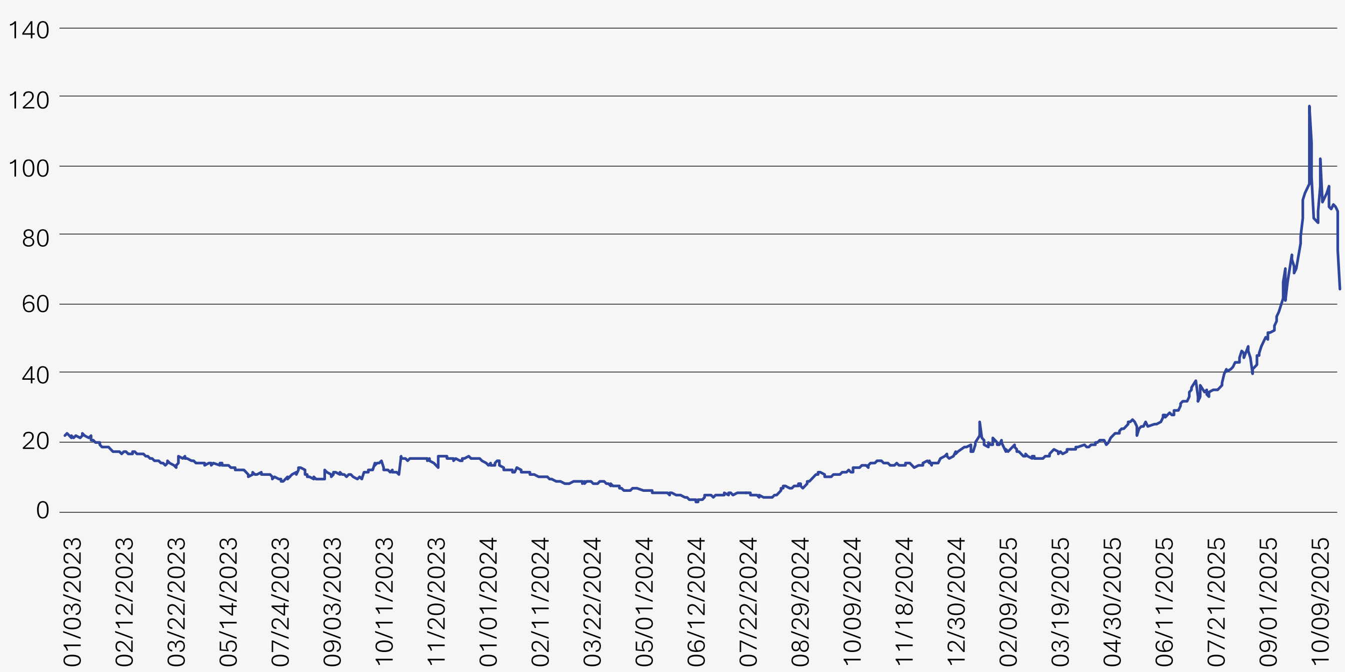


Figure 3. Evolution of benchmark Dutch TTF front month prices from 2019 to October 2021 in EUR/MWh

Source: ICIS.

Securing reliable gas supply and affordable end-consumer prices had always been a politically sensitive issue in Moldova. Successive governments accepted to make political concessions in exchange for cheap gas and electricity prices that would ultimately guarantee their political seats.

With European hub values soaring in summer 2021, it was vital for the new government to clinch a longer-term supply deal and preserve a pricing formula introduced in December 2020.

Under that formula, import costs during the heating season would be fully indexed to oil products, while those charged during the warmer period were fully indexed to spot prices.

Furthermore, Kozak was also confident that Moldova would be willing to compromise on the grounds that it was unable to pay its gas debt which, Gazprom insisted, exceeded USD 700 million for the Right Bank by the time of his visit in August 2021.

2021

European gas prices soar — Russia withholds **extra supply despite rising demand.**

Politics in Moldova

Governments historically traded political concessions for **cheap gas & electricity to secure public support.**

Dec.'20 Formula

New gas pricing model introduced:

Winter
Prices indexed to oil products

Summer
Prices indexed to spot market

Urgency in 2021

With hub prices surging, the new government raced to secure a **long-term deal to stabilise consumer prices.**

Kozak's Leverage

Russia expected Moldova to compromise — **banking on its financial vulnerability.**

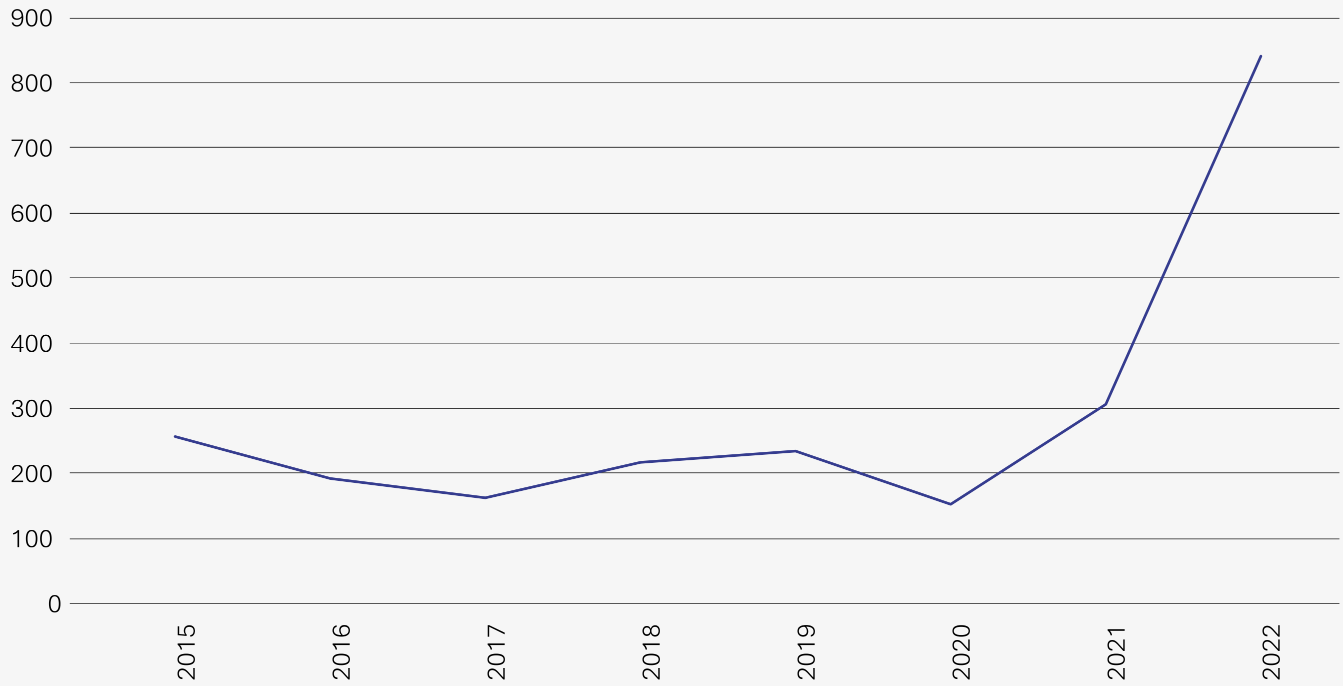


Figure 4. Average annual Russian import gas prices to the Right Bank of the River Nistru in USD/1,000 m³
Source: Sergiu Tofilat.

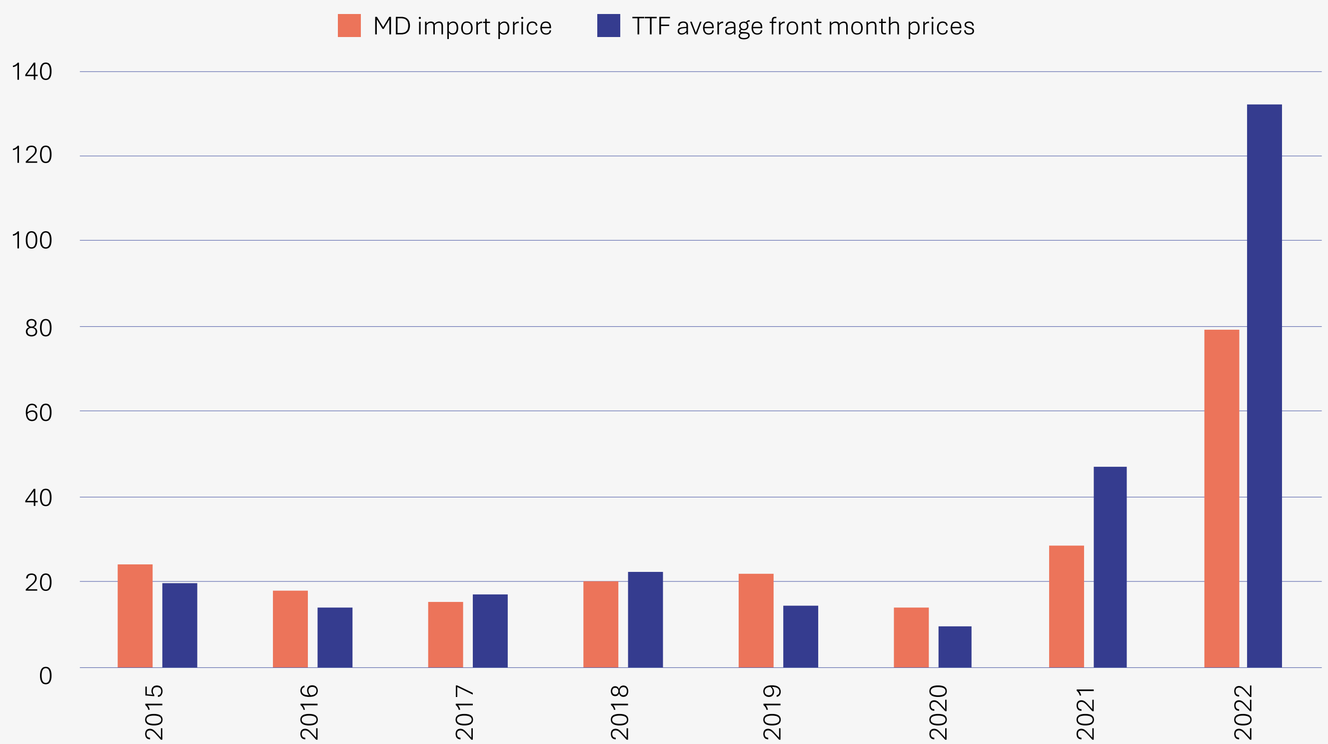


Figure 5. Comparison of average Russian annual gas import prices and average of ICIS TTF front month prices
Source: ICIS and Sergiu Tofilat.

He knew Moldova had not been able to make significant progress regarding the reform of its electricity and gas markets that would have put it in a significantly better position to withstand the brewing energy crisis.

Even though the country acceded to the Energy Community Treaty in 2010, committing itself to align with the EU's free market rules, it took until 2016 to transpose them into law.

Nevertheless, although it had adopted its Electricity Market Law and the parallel Gas Market Law in 2016 to align with the EU's Third Energy Package, in 2021 Moldova was still struggling to unbundle its electricity and gas transmission operations and to establish a competitive market as required under its commitments to the Energy Community.

Between 2016 and 2020, policymakers had been busy amending or issuing a flurry of secondary regulations, which were useful to some degree,[11] but delayed taking the really important steps towards establishing independent transmission operators for electricity and gas.

In 2021, the country was still fully dependent on Russian gas imports and up to 80% of its electricity was supplied from the Dnestrovsk thermal power plant in Transnistria, a generator using Russian gas supply and controlled by Russian electricity incumbent InterRAO.

Expecting a succession of presidential and parliamentary elections, neither the regulator ANRE nor the previous government headed by acting prime minister Aureliu Ciocoi stepped in at the time to take much-needed measures to raise end-consumer electricity and gas tariffs.

Last but not least, Kozak might also have been aware of the fact that in 2019, just before the expiry of Russia's gas transit contract via Ukraine to Moldova and central Europe, the government headed by the prime minister Ion Chicu, backed by a pro-Kremlin parliamentary majority, had been approached by the European Bank for Reconstruction and Development (EBRD) with a loan offer to buy alternative supply in case the contract were not extended.

The Moldovan authorities at the time declined the offer, being confident the contract would be renewed and Moldova would continue to import Russian gas via the Ukrainian route.[12]

Nevertheless, the refusal to cooperate with EBRD in securing a financial instrument arguably deepened Moldova's vulnerability, particularly as it was heading unprepared into its worst-ever energy crisis.

Within weeks of Kozak returning to Moscow, Russia began to threaten Moldova with a reduction in gas supply if it refused to delay the implementation of EU-aligned reform in the energy sector and abandon its Deep and Comprehensive Free Trade Area deal with the EU.[13]

In the final days of September, Gazprom offered to renew the expiring contract for another month while keeping the more expensive spot-price indexation, which would have seen Moldova pay USD 790/1,000 m^3 instead of USD 350/1,000 m^3 if it had switched to the oil-linked formula.[14]

Additionally, it asked for payment of the USD 709 million debt which, it claimed, Moldova owed for deliveries to the Right Bank and threatened to deliver only contractual levels of gas despite the fact that the heating season was starting on 1 October and demand would increase.

Nevertheless, it made no claims for the repayment of Transnistria's debt for supplied gas, which by then was hovering at around USD 8 billion.

On 1 October,

Gazprom delivered only 5.7 million cubic metres per day, even though at that time of year, consumption was expected to rise to 7-8 mcm/day or higher, to 13 mcm/day and above, during the cold winter months.

The spot-indexed contract was extended by another month, which meant that unless Moldova found an immediate solution to secure alternative supply, its population would be left without heating.

Additionally, in October 2021, the MGRES thermal power plant in Dnestrovsk decreased the output of electricity.[15]

Facing an unprecedented crisis, the authorities, which had barely been in power for a few days, had to take a series of emergency measures that were to alter Moldova's course for months and years to come.

The first consumers to be affected by the supply shortfall were the sugar factories as they were in full processing season and thermal power producer Termoelectrica, which provides heating to Moldova's capital Chișinău and was asked to switch partially to heavy fuel oil to save natural gas.

Throughout that time, Moldovagaz ensured that Transnistria was receiving 4 mcm/day, most of which was needed to generate electricity at the 2.5 GW MGRES power plant for exports back to Moldova. The remaining 1.7 mcm/day was kept on the Right Bank for supply to households.[16] Facing a gas supply deficit, the 2.5 GW MGRES power plant also partially switched to coal from the second half of October.

Nevertheless, between 13 and 24 October, there were reports that MGRES was offtaking electricity from the neighbouring Ukrainian electricity system without paying for it.[17]

Since the country did not have a balancing market in place at the time, the electricity entered the power system of Moldova but was later returned in kind.

Although households were receiving both electricity and natural gas, the Moldovan government was in a race against the clock to ensure it had alternative supply in place if Gazprom decided to cut exports altogether from 1 November.

The situation had become unmanageable.

The cold weather was setting in, pushing up gas demand. Russian

USD 8 billion ignored

While Gazprom demanded payment of USD 709 million from Moldova, it did not seek repayment of USD 8 billion owed by Transnistria, **reinforcing regional inequity.**

80% electricity from 1 plant

In 2021, up to 80% of Moldova's electricity came from the 2.5 GW MGRES thermal plant in Transnistria—powered by Russian gas and controlled by InterRAO.

13 October State of alert declared

On 13 October 2021, facing extreme shortages and soaring prices, **Moldova declared an energy state of alert,** requesting citizens to reduce consumption immediately.

Ursula von der Leyen

Moldovan president, Maia Sandu, pleaded for help from Angela Merkel and Ursula von der Leyen.

gas supply entering the country via Ukraine was limited and prices on European gas markets were beginning to approach record-high levels amid a crisis stoked by Gazprom, as became obvious in the months to come.

Moldova had limited financial reserves to buy expensive gas and, even if it wanted to, it did not have any companies with sufficient funds and know-how to step into European markets and secure volumes to plug the deficit at short notice. The only company that had been importing natural gas and had long experience in doing so was Moldovagaz, but the incumbent was majority-owned by Gazprom itself.

Strapped for options, it called on Gazprom to deliver more gas but when the plea was declined, it issued a state of alert on 13 October, asking consumers to reduce demand wherever possible.

The Moldovan administration led by President Maia Sandu began to reach out to European politicians, including to Ursula von der Leyen, President of the European Commission, pleading for emergency help.

Former Moldovan prime minister Ion Sturza, who witnessed events closely at the time, recalled how von der Leyen subsequently reached out to the German chancellor, Angela Merkel, who, in turn, agreed to contact Vladimir Putin to discuss Moldova's plight.

In the meantime, officials at the EU's Directorate General Neighbourhood and Enlargement Negotiations (DG NEAR) contacted Torsten Wöllert, the EU's energy counsellor in Kyiv at the time, asking him to travel urgently to Chișinău to offer assistance.[18]

Diana Jabłońska, who had just taken over as head of unit for Georgia and Moldova at the department, recalled how Moldova began using its small mission in Brussels in a highly effective way to mobilise EU partners to ask for help.[19]

One of the bigger difficulties was that of raising awareness about Moldova's plight and its recent change in leadership as many were not familiar with the country's difficult circumstances.

The other challenge was to set up a working plan to offer financial and technical support.

WORKING GROUP

It became clear from the start that the two priorities were to secure natural gas to plug the shortfall and enough money to buy it. A group of government and international experts was convened and tasked to meet every evening to update one another on progress and discuss the next steps.

Once in Chișinău, Wöllert calculated that Moldova needed EUR 60 million[20] to buy emergency gas volumes but the biggest problem he faced was finding skilled traders to take the risk of buying the gas under extremely taxing circumstances.

He recalled a friend from Ukraine, Willem Coppoolse, who had extensive experience with international energy utilities and more recently had held senior positions with the Ukrainian oil and gas incumbent Naftogaz and the gas transmission system operator GTSOU.

Like Wöllert, Coppoolse had never been to the country but agreed to take up the challenge at short notice.

What surprised both Coppoolse and Wöllert was the level of anxiety of local authorities, who were persuaded that a small country like Moldova could not withstand Russian pressure.

As the situation was becoming increasingly difficult, the government extended the level of alert from the gas sector to the entire country, calling a one-month general state of emergency on 22 October.

Constantin Borosan, who had just joined the Ministry of Infrastructure and Regional Development as secretary of state for energy at the beginning of October, recalled how around that time, pressure in the system had dropped to 13 Bar. It was less than half of the normal 30-34 Bar pressure, as linepack gas was fast being used up. Technical staff were asked to monitor each valve for fear accidents could occur as the pressure was fast disappearing.

STATE OF EMERGENCY

Alarmed by the developments, the Moldovan government adopted the last-resort decision to declare a state of emergency, which effectively gave policymakers the necessary powers to force through exceptional measures. Borosan, who later became a close witness of Moldova's successive energy crises inflicted by Russia in recent years, said the Kremlin never believed Moldova would go so far as to declare a state of emergency.

The law on the regime of emergency, siege and war had been adopted in 2004 and used for a brief period of time in 2021 while the country was still facing the Covid pandemic.[21]

Against that background, Coppoolse and Wöllert devised a plan to launch the first buy tender for the purchase of natural gas.

One of the first steps was for Andrei Spînu, minister of infrastructure and regional development, and state secretary Constantin Borosan to reach out to Energocom, a state-owned wholesaler established in 2004 and whose initial purpose had been to import electricity from Ukraine or Russia.

Over the years, it had also facilitated the sale of electricity produced at MGRES to Moldova and more recently was buying volumes from local renewable producers.

In 2015

Energocom received a gas trading licence but only used it shortly afterwards to buy some small volumes from Romania's OMV Petrom to test flows via the newly commissioned Iași–Ungheni interconnector.[22]

By the time the government senior representatives, as well as Coppoolse and Wöllert, contacted Energocom it had only seven employees, including three people who had experience in buying and selling electricity, a lawyer, a receptionist and the acting director.

Energocom was under-staffed and had very limited working capital but it was the only option Moldova had at the time to enter the market and secure enough volumes to plug the deficit.

It also had no experience in trading gas and when approached with a request to get involved, employees declined, claiming they feared for their careers or even lives.[23]

Given the lack of experience, general fear and inability to find a company that was trustworthy enough to step in on international markets, Coppoolse assumed the informal role of advisor to Energocom and drafted the first buy tender notice, giving out his personal details, including his own mobile phone number and e-mail address.

As an experienced professional in the industry, Coppoolse was known regionally, offering sufficient credibility to counterparties that the tender was real and the money for any delivered gas would be paid.

FIRST TRADES

Preparations were made for the first tender to be issued on Friday 22 October, although, as Coppoolse recalled, the country only had around USD 10 million which had been set aside for the purchase but by Friday afternoon it had not reached the bank from where it was supposed to be paid.

The following day, Prime Minister Natalia Gavriliță approached Coppoolse with a request to start buying gas immediately as the pressure in the transmission system was falling at an alarming level.

Buying gas on a Saturday was particularly difficult as banks were closed and most traders were off for the weekend.

In the end, Coppoolse managed to reach out to three companies, including the Polish state gas company, PGNiG, US-Ukrainian trader ERU and another unnamed Ukrainian trader.

Even so, the challenges they were facing were immense because Moldova had no tender rules, which meant Coppoolse had to take the off-the-cuff decision to form a tender committee, which would select the best offer submitted from the three companies.

The Energocom staff at the time declined to get involved and stepped down, claiming they were afraid of Gazprom and fearful they might lose their jobs in case the government in power fell and a new administration came in.[24]

In the end, the decision was taken not to go ahead with the weekend tenders although the system was on the verge of collapse.

Gas pressure in the system had dropped below the critical level of 15 Bar and the government had to take urgent action to avert a system collapse.[25]

At that point, Moldova's minister for infrastructure and regional development, Andrei Spînu, reached out to Sergiy Makogon, then CEO of Ukraine's gas grid operator, GTSOU, to "lend" some gas to Moldova in line with the clauses of the interconnection agreement between the grid operators in Moldova and Ukraine.[26] The "borrowed gas" was needed to keep the pressure in the system.

Makogon confirmed the Ukrainian government had agreed to help Moldova with 15 mcm, which it consumed over five days[27] but Willem Coppoolse said the CEO had put himself at great risk because if Moldova had failed to return the gas or pay for it, he could have been held personally liable for the missing gas volumes.

Sergiy Makogon, former director general of Ukraine's gas grid operator, GTSOU

By Monday 25 October, Energocom issued a tender for one million cubic metres per day for delivery the next day. The price was indexed to the day-ahead price on the Dutch TTF hub published by price-reporting agency ICIS.

With the Romanian gas grid operator Transgaz offering transmission capacity on the Iași–Ungheni interconnector before the first buy tender was launched, the gas could be delivered either via that border point or via the Oleksiivka interconnection on the Ukrainian–Moldovan border. Energocom received offers from seven companies and in the end declared PGNiG as the first ever company to supply gas to Moldova on a spot basis.

Shortly afterwards, Energocom and PGNiG signed a framework contract devised by the European Federation of Energy Traders,[28] also known as the EFET general agreement, which is used throughout the industry in Europe to streamline over-the-counter electricity and gas trading. The payment was disbursed immediately afterwards.

In fact, everything happened so fast that the whole process, which typically lasts around three months from the moment counterparties negotiate and sign EFET master agreements to the point where they conclude trades and the money is paid, was squeezed into three hours on the day of the tender.

The week before, Coppoolse also faced a major challenge.

OLD RULES, NEW CHALLENGES

The gas purchased by Energocom was supposed to be sold on to Moldovagaz, which was the sole supplier of gas to households. The Commission for Exceptional Situations (CSE) had ordered incumbent Moldovagaz to buy 48 gigawatt hours (approximately five million cubic metres) from Energocom for balancing purposes, which would have covered operational costs and taxes but would not have generated profit.[29]

Nevertheless, to be able to sell the gas, Coppoolse insisted on Energocom signing an EFET agreement with Moldovagaz, a company which had not traded on international markets before and which was operating along rules inherited from Gazprom.

As an outsider coming from the Netherlands and having worked for western companies, the odds of being trusted internally were low but Coppoolse managed to strike an unlikely friendship with one of the oldest employees at Moldovagaz.

That helped Energocom to secure Moldovagaz's EFET signature and by the following week, the wholesaler was in a position to sell the gas to the state supplier.

The tenders continued throughout the final week of October, with Energocom securing a million cubic metres for delivery each day, although all parties involved were facing major risks. Energocom had to ensure that gas was delivered and resold to Moldovagaz.

Meanwhile, sellers, which included Polish PGNiG, Swiss-based energy trading outfits DXT and Vitol, US-Ukrainian ERU and Ukraine's Naftogaz, were exposed to record volatility on markets as prices were following erratic movements amid the gas crisis that was brewing on European hubs.

On Friday 29 October, however, the company issued a tender for five million cubic metres, which would have been used over the weekend and also in the first two days of November as a backup, particularly as 1 November was a public holiday in many European countries.

Earlier in the week, the EU had confirmed[30] it was disbursing a EUR 60 million grant to Moldova to help the country with gas purchases, as requested by Wöllert, but the money was supposed to buy the country only a few weeks' worth of supply, considering the rising costs at that time.

That meant that despite the political stand-off with Moscow, Moldova had to persuade Gazprom to extend the stopgap contract and provide affordable oil-indexed gas prices.

Firm Offers to Energocom for supply of 1 MCM on October 26, 2021

	Validity	Quantity	Delivery point	Reference to	Spread to TTF EUR/MWh	Fixed prices in EUR/MWh	Price in USD/1000	Total cost
Company 1	ok	1 MCM	Oleksiivka	TTF DA Mid + 6	6	94.125	1160	1,159,807
Company 2	ok	1 MCM	Oleksiivka	TTF DA Mid + 2.95	2.95	91.075	1122	1,122,225
Company 3	ok	1 MCM	Oleksiivka	TTF DA Mid + 2.54	2.54	90.665	1117	1,117,173
Company 5	not ok	1 MCM	Oleksiivka	TTF DA Mid + 2.5	2.5	90.625	1117	1,116,680
Company 6	not ok	1 MCM	Oleksiivka	TTF DA Mid + 3	3	88.325	1088	1,088,339
Company 4	ok	1 MCM	Oleksiivka	TTF DA Mid + 2.87	2.87	90.995	1121	1,121,239
Company 7	not ok	1 MCM	Ungheni	TTF DA Mid + 6	6	94.125	1160	1,159,807
Ranking valid offers								
Company 3	ok	1 MCM	Oleksiivka	TTF DA Mid + 2.54	2.54	90.665	1117	1,117,173
Company 4	ok	1 MCM	Oleksiivka	TTF DA Mid + 2.87	2.87	90.995	1121	1,121,239
Company 2	ok	1 MCM	Oleksiivka	TTF DA Mid + 2.95	2.95	91.075	1122	1,122,225
Company 1	ok	1 MCM	Oleksiivka	TTF DA Mid + 6	6	94.125	1160	1,159,807

Firm Offers to Energocom for supply of 1 MCM on October 27, 2021

Tender organized on October 26, deadline 12.30 CET								
Company 6	ok	1 MCM	Oleksiivka	TTF DA Mid + 2.87	2.87	89.87	1104	1,103,719
Company 5	ok	1 MCM	Oleksiivka	TTF DA Mid + 0.69	0.69	87.69	1077	1,076,945
Company 2	ok	1 MCM	Oleksiivka	TTF DA Mid + 2.95	2.95	89.95	1105	1,104,701
Company 3	ok	1 MCM	Oleksiivka	TTF DA Mid + 2.51	2.51	89.51	1099	1,099,297

Firm Offers to Energocom for supply of 1 MCM on October 27, 2021								
Tender organized on October 26, deadline 12.30 CET								
	Validity	Quantity	Delivery point	Reference to	Spread to TTF EUR/MWh	Fixed prices in EUR/MWh	Price in USD/1000	Total cost
Ranking valid offers								
Company 5	ok	1 MCM	Oleksiivka	TTF DA Mid + 0.69	0.69	87.69	1077	1,076,945
Company 3	ok	1 MCM	Oleksiivka	TTF DA Mid + 2.51	2.51	89.51	1099	1,099,297
Company 6	ok	1 MCM	Oleksiivka	TTF DA Mid + 2.87	2.87	89.87	1104	1,103,719
Company 2	ok	1 MCM	Oleksiivka	TTF DA Mid + 2.95	2.95	89.95	1105	1,104,701

Firm Offers to Energocom for supply of 12 MCM on October 30, 2021 till November 2, 2021								
Tender organized on October 29, deadline 12.00 CET								
Company 6	ok	128,525	Oleksiivka	TTF DA Mid + 4.14	4.14	64.14	795	9,645,004
Company 1	ok	128,525	Oleksiivka	TTF DA Mid + 7	7	67	831	10,075,075
Company 3	ok	42,000	Oleksiivka	TTF DA Mid + 4.2	4.2	64.2	796	3,184,884
Ranking valid offers								
Company 6	ok	128,525	Oleksiivka	TTF DA Mid + 4.14	4.14	64.14	795	9,645,004
Company 3	ok	42,000	Oleksiivka	TTF DA Mid + 4.2	4.2	64.2	796	3,184,884
Company 1	ok	128,525	Oleksiivka	TTF DA Mid + 7	7	67	831	10,075,075

Figure 6. Results of Moldova's natural gas buy tenders (cont.)
Source: Willem Coppoolse.

As the week drew to a close, the minister of infrastructure and regional development, Andrei Spînu together with Moldovagaz CEO Vadim Ceban, headed to St Petersburg, hoping to clinch the deal with Gazprom.

Wöllert and Coppoolse understood they had to consolidate Energocom by hiring more staff to ensure it was well equipped to start buying volumes on other markets in case Russia cut deliveries.

However, they soon realised there was barely anyone in Moldova who had any relevant experience, which meant that any candidates who came forward had to be considered purely based on their moral credentials, considering they would have to handle millions of euros for future purchases of gas.

The vacancies were posted by the Agency for Public Property (APP), which controls Energocom, and candidates were interviewed in the evening in an old government building in Chișinău.

Wöllert recalled how during the interviews, a former military officer turned up. When asked whether he had any experience of trading energy or indeed whether he had ever been involved in the gas sector he said no. Nevertheless, when the EU official pressed him, asking why he was interested in the position, he responded that if the country needed him, he was ready to help.[31]

NEGOTIATING WITH GAZPROM

Throughout this period, Kozak, Putin's old ally, was driving the message that in the absence of Russian gas or if Moldova were to purchase volumes at high prices, the country could face widespread social unrest.[32] Local Russian-sponsored TV channels were running stories both in Romanian and Russian and carrying similar messages.

For over three decades, Moldova had been forced to accept political concessions, often at great costs, which governments had to pay to avert military flare-ups in Transnistria or the prospect of losing the country's sole electricity and gas supplies, which were controlled by Moscow.

Now the prospect of facing crises on all fronts was more real than ever.

Dmitry Kozak was reiterating the Kremlin's request made earlier in August to legalise Russia's 1,500 peacekeepers in Transnistria. In exchange for effectively acknowledging Moscow's control of the region, the country would have received sufficient gas to meet winter demand.[33]

Coppoolse and Wöllert were convinced the tactic was meant to inflict more fear and test the government's resolve, expecting it to give in and agree to make concessions.

Vadim Ceban, Moldovagaz JSC, Chairman of the Board

For Vadim Ceban, the CEO of Moldovagaz who later travelled with minister Andrei Spînu to St Petersburg, the month that was coming to an end had been exceptionally difficult.

Although representing the interests of a company majority-owned by Gazprom, he also had to ensure Moldovan consumers were protected and his government's requests were followed through.

In hindsight, he believes October 2021 was not only the month when Moldova witnessed an existential crisis triggered by an accumulation of errors and failure to liberalise the market but also a major crossroads where it had to decide whether it continued to remain under Russian control or yank itself out of Moscow's orbit and follow a western path of reform.

USD 340/1000m^3 Saved on Gas

New deal signed on 30 October cut winter gas price to USD 450/1,000 m^3, down from USD 790—a saving of USD 340 per 1,000 m^3.

Hybrid Price Formula

Gas priced 70% oil-linked, 30% spot in winter (reversed in summer), dropping to USD 400/1,000 m^3 by December.

3 Billion m^3 Secured

Moldova locked in 3 billion m^3/year for five years—enough to cover peak seasonal demand.

Emergency Declared

A state of emergency gave the government power to act fast—helping it break free from total Russian energy dependence.

When he arrived in St. Petersburg he knew that an extended gas supply contract was needed to tide Moldova over the winter months but in the longer term the country had to clear a mounting backlog of tasks which had been piling up over the years and could no longer be delayed.

By 30 October, Spînu and Ceban announced that they had signed a five-year gas deal for the supply of three billion cubic metres annually.

Importantly, the two had succeeded in persuading the Russian producer to offer cheaper prices, which meant that Moldova was due to pay USD 450.00/1,000 m^3 that winter, USD 340.00/1,000 m^3 cheaper than the spot-indexed price Gazprom had insisted on at the end of September.[34] The price formula introduced a hybrid arrangement whereby the price would be 70% linked to oil and oil-products and 30% to spot prices during the heating season, a ratio that would be reversed during the warmer quarters of the year.

That meant that by December the price was expected to fall even lower to USD 400.00/1,000 m^3 in line with oil prices.[35]

In exchange, Moldova was asked to delay the unbundling of its gas transmission operations and restructure the debt for the Right Bank, which Gazprom argued had reached USD 725 million by 31 October 2021. Spînu said at the time the country was due to launch an independent audit into the debt.

Nevertheless, there was also a requirement to convene for subsequent discussions for an intergovernmental agreement to be signed before the end of the year that would have focused on the gas debt and political issues. Those included the federalisation of Moldova to grant Transnistria equal status to the rest of the country or agreeing to build an airport in Tiraspol, Transnistria's main city.

Former prime minister Sturza said it was interesting to note that the negotiations were held with the Gazprom CEO himself, Alexey Miller, and that they unfolded at a very fast pace, pointing out that normally such discussions would happen at a much less senior level, with it taking longer for the Kremlin to rubberstamp the agreements.[36] Nevertheless, Sturza believes that Angela's Merkel intervention at the request of Maia Sandu may have swayed Putin to compromise.[37]

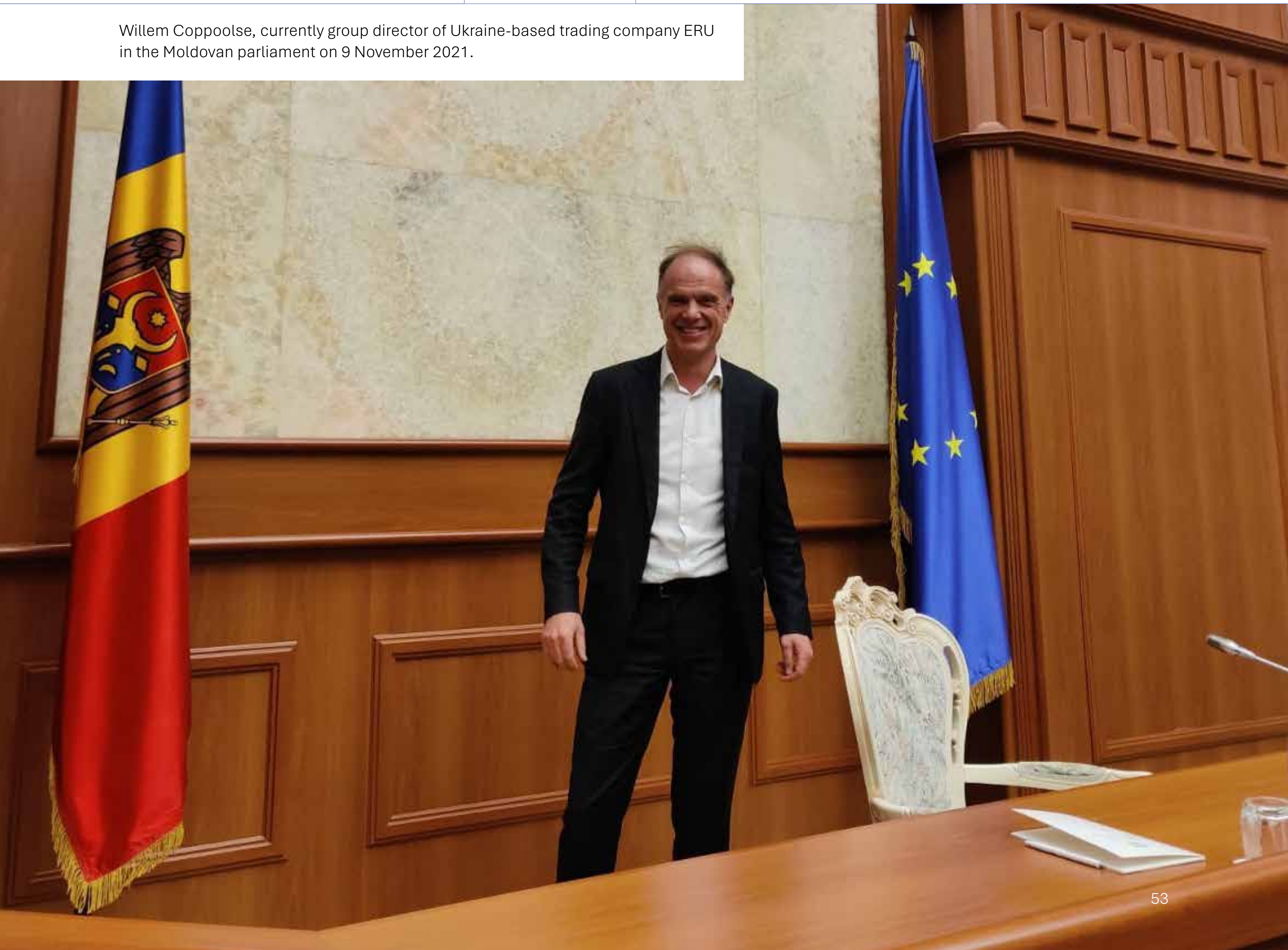
Wöllert and Coppoolse, however, are persuaded that Moldova's ability to beat all expectations and secure gas on the spot market proved that the country had successfully slipped from Gazprom's control and was beginning to diversify away.

For Constantin Borosan, the most decisive point was the fact that the government declared a state of emergency, which enabled it to take swift steps to counter Russia's intention to push the Moldovan energy system to the verge of collapse.

There is no doubt that the market prices Moldova paid for spot volumes secured at that time were high but simply being able to show it could survive without Russian gas sent a powerful message and forced Gazprom to accept it was no longer in the position to hold the country hostage.[38] The months ahead were to prove just as exerting as the month that had just come to an end.

Consult this chapter endnotes at page 198.

Willem Coppoolse, currently group director of Ukraine-based trading company ERU in the Moldovan parliament on 9 November 2021.



CHAPTER 3

Preparing to enter markets

Sorely ill-prepared

after decades of mismanagement and corrupting Russian influence, Moldova came close to breaking point in October 2021 even as its incoming administration was scrambling to find a foothold, struggling to understand the legacy it had inherited.

Strapped for choice and facing social unrest as temperatures were plunging, the government reached out to the EU, asking for emergency financial and technical support to secure the natural gas supply to keep the pressure in the system and tide the country over until a compromise could be reached with Russia to increase deliveries at affordable prices.

It turned out to be a wise decision.

Thanks to European partners, Moldova made its first ever purchases of natural gas on EU markets, showing it could break free from its historic dependence on Russian exports and seek options elsewhere.

It was the lever that Moldova needed to resume negotiations with Russia's Gazprom and clinch a new five-year contract on terms that were largely beneficial to its interests.

Nevertheless, the work that now lay ahead for the new government was no less formidable than the battle it had just mounted to bring the gas system back on an even keel and avert a crisis of unprecedented proportions.

All that became clear to Artur Lorkowski, who took over as director of the Energy Community at the beginning of December 2021.

In office for less than a week, his first trip abroad scheduled for 6-7 December 2021 was to Moldova, where he met local government representatives as well as western partners who were already on the ground.[1] He was joined by colleagues from the Energy Community, as well as by the deputy director-general for Neighbourhood Policy and Enlargement Negotiations, as they aimed to coordinate EU and Energy Community Secretariat actions and speak with one voice.

EU Gas Purchases

In October 2021, Moldova made its first-ever EU market gas purchase—a historic shift from total reliance on Russia.

5 Year Deal Signed

The EU-backed pivot enabled a new 5-year supply deal with Gazprom at flexible, hybrid prices.

MDL 1.8Bn deficit in 2 Months

The gap between wholesale and retail prices created a MDL1.8 billion gap in September-October alone, equivalent to USD 101 million.

USD 759 Purchase price vs USD 238 Tariff

In October, Moldova paid USD 759/1,000 m^3 for gas, while tariffs remained at USD 238/1,000 m^3—a massive shortfall.

During his fact-finding mission, Lorkowski was struck by everyone's willingness to help even if, at the time, many of the western partners appeared to have limited understanding of what needed to be done.

Nevertheless, as a former senior government official directly involved in negotiations for Poland's gas supply contract with Russia, Lorkowski found that his Polish experience from over a decade ago came in useful in understanding Russia's demands in Moldova.

He remembered that in 2009-2010, when Poland had discussed its own gas supply agreement with Gazprom, Russians had used similar tactics: provoking a supply crisis, then pushing for the signing of an intergovernmental agreement with constraining clauses that would block the application of EU rules and integration with EU markets.[2]

In Moldova's case, the gas supply contract and related intergovernmental agreement negotiated at the end of 2021 would enable Moldova to secure flexible gas imports for the following five years at prices linked to a hybrid formula involving oil and hub prices.[3]

However, it also included several onerous terms which had to be addressed promptly, not least the launch of an audit into Moldovagaz's debt for gas delivery to the Right Bank of the River Nistru, the restructuring of that debt and a pledge to delay the unbundling and certification of an independent gas transmission system until the debt issue had been addressed.[4]

Politically, Russia also reiterated a number of requests such as the establishment of an airport in Tiraspol in Transnistria. However, those were dismissed outright by the Moldovan authorities.[5]

A major issue was also the need to increase end-consumer tariffs to plug a gaping deficit.

Although gas prices had been clearly on the rise in the second half of 2021, the previous government led by acting prime minister Aureliu Ciocoi and the management of the regulator ANRE at the time failed to take remedial action to ensure tariffs were aligned with rising wholesale prices.

By the end of that month, when Gazprom was pushing Moldova to pay for supply at a fully hub-indexed price rising well above USD 700.00/1,000 m^3, its end-consumer gas tariffs were USD 238.00/1,000 m^3 without value added tax.[6]

That meant that as Moldova had to pay USD 504.00/1,000 m^3 for September and USD 759.00/1,000 m^3 for gas imported in October, the deficit caused by the difference between the purchase price and the end-consumer tariff for just those two months amounted to MDL 1.8 billion (EUR 94 million or USD 101 million).[7]

The situation became particularly pressing by the end of September, when Russia was threatening to limit gas flows to Moldova if it did not start clearing some of its arrears on a historic debt in excess of USD 700 million.

The regulator ANRE sought to intervene but—as recounted by Alexandru Ursu, who was heading the watchdog's gas department at the time—the volatility on wholesale markets was so high that price movements were impossible to predict.

There was also the uncertainty related to Moldova's ability to secure a new contract and the price at which the agreement would be negotiated.[8]

By the start of November and with the agreement secured, the regulator began to intervene, introducing the first tariff increase, which more than doubled the end-consumer tariff from MDL 4.80/m^3 to MDL 11.00/m^3 (USD 527.00/1,000 m^3). The highest end-consumer gas tariff that Moldova had had until then was MDL 6.20/m^3.[9]

Thanks to the new contract, the purchase price was linked to a formula which meant that it was 70% linked to oil and oil products during the heating season, with the remaining 30% being indexed to the Dutch TTF front month reference price. The ratio would reverse during the other six months of the year.

Nevertheless, the tariff increase was critical if Moldova wanted to put a crisis plan in place and had to be followed by four other subsequent increases in 2022, which eventually lifted the end-consumer gas tariff to USD 1,332/1,000 m^3 by October 2022.

Even so, when the first tariff increase was made, the hike was insufficient to help the country recoup the MDL 1.8 billion losses incurred because of the gaping difference between soaring wholesale prices and the capped retail tariffs.

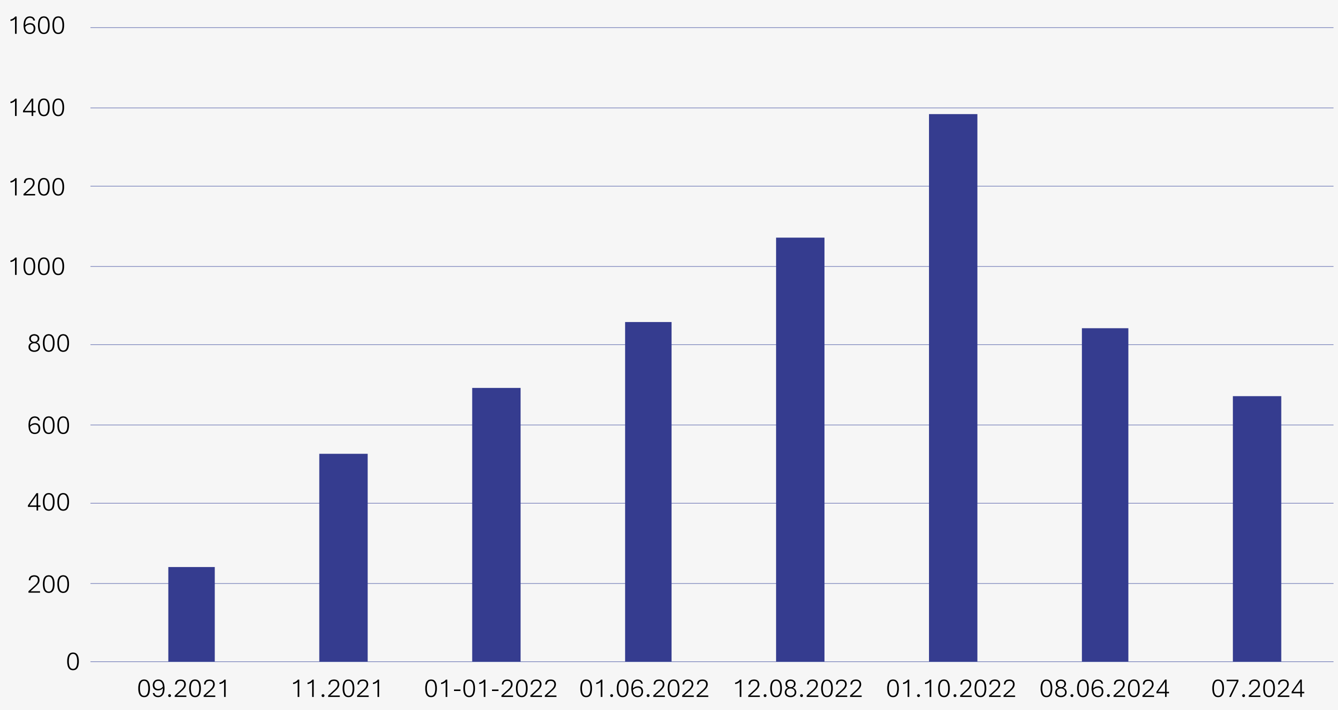


Figure 7. Evolution of natural gas tariffs to households in USD/1,000 m^3
Source: ANRE.

That was primarily due to the volatility of the spot market but also because a steep rise would have led to widespread social unrest at a time when the pro-Russian opposition parties were propagating fake news supported by Russia suggesting the crisis had been provoked by pro-European politicians to misappropriate Moldova's public funds.[10]

To avert social unrest, the government decided to subsidise nearly three-quarters of the tariff increase to all households as the country did not have a mechanism in place at the time to target only vulnerable consumers.

Diana Jabłońska, who had taken over as head of unit for Georgia and Moldova at the EU's Directorate General for Neighbourhood and Enlargement Negotiations (DG NEAR) just days before the energy crisis of October 2021 started, recalled how a decision was taken immediately afterwards to disburse a grant of EUR 60 million to help vulnerable consumers.[11]

Nevertheless, the difficulty lay not only in finding the money but also in fast-tracking procedures to channel the money.

She said that, despite the time pressure, neither EU nor Moldovan officials "cut any corners", abiding by all rules but still managing to get the money to consumers in record time and help avert a social crisis.

Under normal circumstances, such grants may take up to a year to be approved, she said. In Moldova's case, EU officials took two months from the moment the process was initiated in October 2021 until the date when it was disbursed to recipients at the end of December that year.

Over the following years the grant was topped up, with three more tranches of EUR 75 million, EUR 70 million and EUR 35 million being provided through the EU's budget support between August 2022 and July 2024 and was conditional upon Moldova implementing reforms in the energy sector.[12]

Lorkowski believes that the grants, which Moldova received from the EU thanks to support from Katarina Mathernová, who was deputy director-general of the EU's Directorate General for Neighbourhood and Enlargement Negotiations (DG NEAR) at the time, was of instrumental help to support vulnerable groups.

He and Mathernová understood that the biggest risk facing Moldova was the ability to secure funds to help vulnerable consumers meet rising costs.[13,14]

By the time the second end consumer tariff increase from USD 527.00/1,000 m^3 to USD 690.00/1,000 m^3 was introduced on 1 January 2022, the country already had a system in place to identify and compensate vulnerable groups in need of state support.

Similar hikes were introduced for electricity, as tariffs saw a succession of five increases, rising from MDL 1.44/KWh (EUR 0.07/MWh) on 1 April 2022 to MDL 5.78/KWh (EUR 0.30/MWh) by the end of the year.[15]

USD 759/m^3 Gas in Oct 2021

Moldova paid record prices amid Russian pressure, creating a USD 101M shortfall due to frozen consumer tariffs.

5 Tariff Hikes in 2022

Gas prices for households rose from USD 238 to USD 1,332/m^3 over one year to cover soaring import costs.

EUR 60M in 2 Months

EU disbursed emergency aid to Moldova in record time to subsidise bills and prevent social unrest.

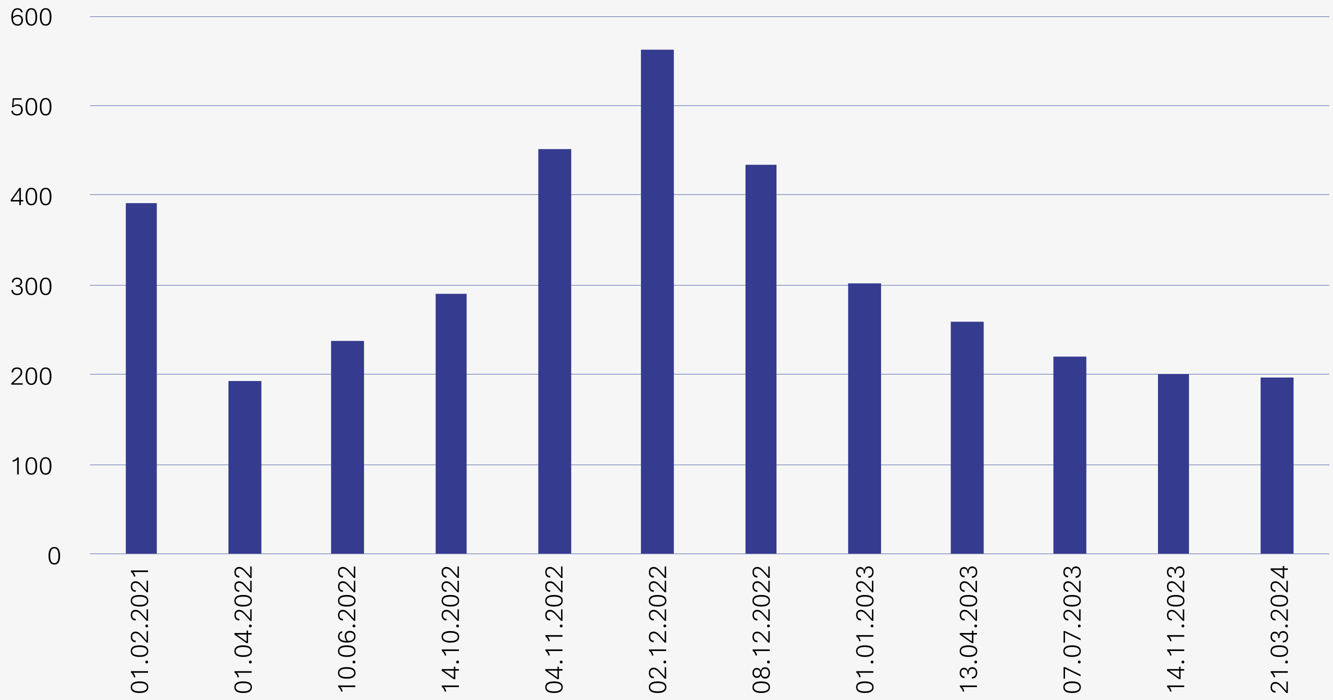


Figure 8. Average of low-voltage, medium-voltage and high-voltage electricity tariffs in the Republic of Moldova in MDL bani/KWh

Source: ANRE.

While the tariff rises were critical to ensure Moldova could pay the price of gas, which continued to break new records in 2022, the government had to work on launching the Moldovagaz debt audit as agreed during negotiations with Gazprom in October 2021.

Alexei Taran, general director of regulator ANRE.
Source: Energy Community

LEGAL ISSUES

On the second day of Lorkowski's fact-finding visit to Moldova at the start of December 2021, he and a number of western partners agreed that Moldova's priorities at the time, were the country's outstanding debt to Gazprom and the consolidation of Energocom as an instrument guaranteeing supply security. Another important objective, which was successfully achieved, was to support Moldova in rejecting Russia's request to sign the intergovernmental agreement, which would have deepened its dependency on Gazprom and disabled it from pursuing reform.[16]

As the new agreement had already been signed, the EU commissioned Professor Alan Riley, a competition law scholar, to travel to Chişinău to assess Moldovagaz's historical supply arrangements with Russia's Gazprom and the legitimacy of the debt, which the Russian producer was now pushing Moldova to clear.

As Moldovagaz's minority shareholder, the government facilitated access to the agreement, which Professor Riley described as the "most abusive contract which had probably ever been written", if excluding agreements between Gazprom and its Belarusian subsidiaries.[17]

Riley said the powers that previous arrangements had given Gazprom over the years were so extensive that they raised suspicions as to whether Moldova ever took any legal advice to protect its interests.[18]

His task was to assess to what extent Moldova was liable to pay the USD 700 million debt which Gazprom said the country's Right Bank had accumulated over the past three decades since independence.

Tackling Moldova's debt was a priority not only because Gazprom was now pressing for a solution but also because in the past the Russian producer had repeatedly made any structural reforms such as the unbundling of gas transmission operations conditional upon Moldova clearing its arrears.

EU representative Alexandru Săndulescu said that even back in 2020, Russian counterparts insisted, as part of the Moldovan–Russian mixed commission, on signing of a protocol related to clearing the debt, an idea which was later abandoned.[19]

Audit Deadline Missed

Independent audit of Moldova's debt, originally due May 2022, was delayed until June 2, 2023.

Big 4 Decline Audit

Major audit firms refused Moldova's debt review—deemed too politically sensitive.

Energocom Capital Boost

Gov't injected MDL 1.33B (USD 75M) into Energocom on Nov 26, 2021 to strengthen supply resilience.

50% Advance Payment Rule

Gazprom demanded Moldovagaz pay half of monthly deliveries upfront—unprecedented since 2006.

Cashflow Crisis Hits

Moldovagaz couldn't secure loans as inflation soared to 16.56% in Jan 2022, worsening liquidity.

With a new supply contract secured, the government had to start organising a tender for an independent audit of Moldova's Right Bank debt, which was due to be submitted by 1 May 2022, as negotiated with Gazprom.

However, as recalled by former prime minister Ion Sturza, who was watching events very closely, none of the big four international auditing firms wanted to get involved.

He said he himself had tried to persuade high-profile auditors to participate but added that the matter was seen as being too political. He recounted how Moldova wanted the debt to be scrapped entirely, while Gazprom was insisting on Chișinău paying a sum that was in excess of USD 700 million at the time.[20]

When Alan Riley arrived in Moldova, he enlisted the support of colleagues at the Norway-based Wikborg Rein law firm, which had come to prominence four years earlier when it won a major arbitration case initiated by the Ukrainian incumbent Naftogaz against Gazprom for the under-delivery of gas shipped via Ukraine.[21]

After delays in hiring external auditors, the government tasked its Public Property Agency (APP) to hire Wikborg Rein and UK-based Forensic Risk Alliance to perform the independent audit, whose initial completion date was set for 30 January 2023 but which was eventually published on 2 June 2023.[22]

Nevertheless, even though Moldova had succeeded in securing a new five-year supply contract, Moldovagaz board member and energy expert Sergiu Tofilat said Gazprom continued its "subversive actions".[23]

He described how the Russian producer reintroduced an old contractual term, asking Moldovagaz to pay in advance for gas deliveries though such a requirement had never been used since it was first included in the supply agreement in 2006.

Gazprom insisted on Moldova paying 50% in advance for deliveries the following month, which created cashflow issues at Moldovagaz.

Tofilat said Gazprom had never used the advance payment requirement until then because it saw previous governments as being aligned. However, with the pro-European PAS party in charge, the Russian producer was more concerned about securing the political loyalty of the local elite than the commercial aspect of the contract.[24]

The expert said that by introducing that requirement, Gazprom was aiming to blackmail Moldova, threatening it with cutting the monthly supply.

Vadim Ceban, CEO of Moldovagaz, confirmed the company was in a difficult position at the time because of cashflow issues caused by the fact that consumer tariffs were paid later than the advance payments requested by Gazprom.[25]

He said banks could not offer credit because they themselves were facing cashflow issues linked to soaring inflation as consumer prices rose 16.56% year on year in January 2022 compared to 13.94% the previous month.[26]

As a result, the government agreed to delay the payment of value added tax by Moldovagaz and compensate it in advance for end-consumer deliveries in January 2022.

Just a month before the end of 2021, the government also agreed to capitalise Energocom by transferring MDL 1.33 billion (USD 75 million, EUR 68 million) to the state wholesaler. The sum represented the debt held by thermal producer Termoelectrica to Moldovagaz for earlier gas deliveries. The decision was announced by the Commission for Exceptional Situations on 21 October but was implemented by government decision on 26 November 2021.[27]

Later on, in March, May and August 2022, as gas demand was falling, Moldovagaz could sell some of the surplus volumes to state wholesaler Energocom, which was tasked with creating gas stocks ahead of the new heating season.

Sergiu Tofilat, energy policy analyst at Community WatchDog.

HUNTING KNOW-HOW

Meanwhile, another challenge facing the government was the lack of human resources in key government positions. The country did not have a dedicated energy ministry and needed employees with substantial know-how and experience to handle the numerous and wide-ranging problems that had arisen.

Constantin Borosan, who at the time was state secretary for energy at the Ministry of Infrastructure and Regional Development, said he understood that Moldova needed to address two priorities.[28]

The first related to establishing a group of experts who could be called in at short notice. To that end, he reached out to the Energy Community and invited the international organisation to establish a subsidiary in Chișinău.

Mindful of the need to attract more experts, the government launched talks to secure additional technical assistance from international partners, including from specialists contracted by the United States Agency for International Development (USAID).

Equally important was to hire more staff at Energocom and place the state wholesaler in charge of electricity and gas purchases to guarantee the country's security of supply. In parallel, talks kicked off with the European Bank for Reconstruction and Development (EBRD), which got approval for a revolving EUR 300 million credit by early spring 2022.[29]

The second priority was linked to the importance of adopting a set of measures that would allow Moldova to react promptly in case of emergency.

As a result, the government proposed the introduction of an obligation to hold 10 days' worth of the previous winter's gas consumption.

The 10-day period was deemed sufficient to allow the country to secure alternative supply in case of disruptions. The requirement was included in an amendment to the Natural Gas Law 108 of 2016 adopted on 10 September 2022.[30]

OVERDUE DECISIONS

Well over the gas supply crisis, the government could now also concentrate on a few critical issues that needed to be addressed and that were part of its reform commitments.

One of those issues related to the unbundling and certification of the electricity grid operator Moldelectrica, with transmission operations first expected to be divested in 2018 in line with the ownership unbundling model.[31]

The regulator ANRE issued a preliminary decision on the certification of Moldelectrica on 5 June 2019 and notified the Energy Community Secretariat a week later on 11 June 2019.

Nevertheless, the certification failed because the conditions on separation of control and ownership over transmission, as envisaged under the ownership unbundling model, were not fulfilled.[32]

The Energy Community Secretariat, which was supposed to issue its final opinion on the certification, pointed out in October 2019 that the company did not own the transmission assets, which was one of the core conditions for certification under the ownership unbundling model, the only model recognised under Moldovan law at the time.

In addition, the Energy Community Secretariat noted that "both Moldelectrica and the Public Property Agency, which was exercising direct control over the state companies involved in generation and supply activities of electricity and gas were directly subordinated to the same public body, the Ministry of Economy at the time, which, in the Secretariat's view, was not compliant with Article 9(1)(b) of the Electricity Directive. In line with the Secretariat's Opinion, ANRE did not adopt a certification decision as required by Article 10 of the Electricity Directive."[33]

Following the failure to divest the operator in line with the ownership unbundling model, Moldova adopted

Law 20/2022 amending the Electricity Law 107/2016. Article 26[1] of the amending law, which was adopted in February 2022 transposed the independent system operator (ISO) model of unbundling from Articles 13 and 14 of the EU's Electricity Directive.

At the same time, assessing Moldova's reform progress in the natural gas sector, the Energy Community Secretariat concluded that by failing to comply with requirements under the EU's Gas Directive for unbundling and certification of gas transmission operations, the country had failed to comply with its obligations under the Energy Community Treaty. The Secretariat initiated dispute settlement proceedings on 24 January 2022,[34] later followed by a Reasoned Opinion on 31 May 2023.

As a result of the amendments to the Electricity Law and the Energy Community's dispute settlement proceedings related to the unbundling of gas transmission operations, Moldova was now forced to take decisive action to carry out the much-delayed divestment of its electricity and gas transmission operations.

However, the challenges Moldova faced were to become even more formidable, with Russia's full-scale invasion of Ukraine on 24 February 2022 and the unprecedented energy crisis that erupted in Europe shortly afterwards testing its limits beyond all expectations.

Consult this chapter endnotes at page 200.

CHAPTER 4

Severing old Soviet ties, connecting to Europe

On 20 January 2022,

the Moldovan Parliament voted to lift the state of emergency which had been introduced two months earlier.[1]

The country had overcome an energy crisis of unprecedent proportions as Russia had limited gas supply when winter demand started to set in at the beginning of the heating season in October.

Having shown that it could find alternative sources of gas, which later proved critical in securing a five-year supply deal with Russian producer Gazprom on terms that were beneficial to Moldova, the new government in Chișinău was getting ready to implement long-delayed energy market reforms.

At the start of 2022, it reinitiated discussions on the unbundling of its electricity and gas transmission operations and was preparing to embark on one of the most important projects undertaken in Moldova since the country gained its independence in 1991.

Moldova and neighbouring Ukraine had been in discussions since 2006 to disconnect from the Russian and Belarusian electricity grids to which their transmission lines had been linked since Soviet times and synchronise with the European system[2] operating under the umbrella of the European Network of Transmission System Operators for Electricity (ENTSO-E).[3]

When discussions were initiated, the idea was to create more competition and allow Ukraine and Moldova, which had excessive capacity built during Soviet times, to evacuate the surplus energy to the region.[4]

Over the years, neighbouring Romania also expressed an interest in synchronising with Moldova as the two countries had joint plans to expand their interconnecting power lines.

Although the synchronisation project had been on the discussion table for nearly two decades, it had been delayed, not least because of a lack of financing for carrying out the required feasibility studies.[5]

By 2014, however, it came back on the agenda and financing was secured in 2016, by which time the electricity transmission system operators in Ukraine and Moldova, Ukrenergo and Moldelectrica started to undertake technical analyses, including assessments of inter-area frequency oscillations, an issue which had emerged in southern Europe after Turkey synchronised with ENTSO-E in 2011.[6]

Emergency Lifted

Parliament ended the state of emergency, marking the end of the gas crisis.

Energy Reform Launched

Moldova prepared major energy market reforms—biggest project since independence.

Grid Sync in Progress

Moldova and Ukraine planned to disconnect from Russian grid and sync with ENTSO-E.

2016
Feasibility Funded

Technical studies began after financing was secured for ENTSO-E synchronisation.

2017
Agreement Signed

Ukraine, Moldova, and ENTSO-E agreed to prepare for 2023 grid synchronisation.

2022
Two Key Tests Set

ENTSO-E required isolated winter and summer tests to prove 50Hz frequency stability.

An agreement was reached between Ukraine, Moldova and ENTSO-E in 2017 to prepare for the synchronisation, which was scheduled for 2023.

By 2021, Ukraine and Moldova, which were seen as a bloc, were already in discussions with ENTSO-E to carry out several tests that were required ahead of the full synchronisation and subsequent launch of commercial flows within the ENTSO-E system.

As the larger operator, which had been pushing for the synchronisation for many years, Ukrenergo became the project leader and agreed with ENTSO-E to carry out the two preliminary tests in winter and summer 2022.

The tests involved decoupling from the Russian IPS/UPS synchronous transmission grid to which Ukraine and Moldova were connected and operating in full isolation for a few days in winter and summer when the system loads were very high because of rising demand.

The tests were necessary to prove the Ukrainian–Moldovan bloc could maintain a steady frequency of 50 Hertz (Hz) on the transmission lines.[7]

If successfully completed, the two countries were expecting to disconnect completely from the Russian and Belarusian grids in 2023 and synchronise with ENTSO-E.

To fulfil the isolation condition, Ukraine and Moldova had to agree with Russia and Belarus on the date of the first test in winter and a proposal was made by Ukrenergo for 15-17 February 2022.

As the first test approached, dispatchers at Russia's Unified Energy System (UES) notified Ukrenergo that the date would have to be changed because of an expected outage at the Russian 3 gigawatt (GW) Kursk nuclear power plant, which was close to the Ukrainian border.

Ukrenergo agreed to move the test dates to 24-27 February 2022, as Ukrainian dispatchers expected the weather to be cold enough to create the high demand conditions required by the ENTSO-E tests.[8]

As the decoupling was scheduled for 24 February at midnight, eastern European summer time (EEST), Ukrenergo started to unplug its cross-border interconnectors the day before.

The first to be disconnected on 23 February was the Burshtyn Energy Island in western Ukraine, which had already been operating in synchronous mode with ENTSO-E since 2002.

Later on,

Ukrenergo unplugged the lines to Belarus and as the day was drawing to a close it had six remaining lines with Russia, which were the last to be unplugged.

Nevertheless, although Ukrenergo and Moldelectrica were expecting to complete the decoupling by midnight, Russian dispatchers said they had some technical issues and there was also a change in shifts on duty, which meant the unplugging of the final lines could not happen by the set time.

Eventually, on 24 February at 01:32 hours EEST, Ukraine succeeded in disconnecting the final line to Russia.

Ukrenergo's CEO at the time, Volodymyr Kudrytskyi, had gone home an hour before midnight, but several other specialists were still there ensuring the system was operating at a stable frequency of 50 Hz.

As the decoupling was successfully carried out and the system was operating within expected parameters, all specialists had gone home by 03:00 hours EEST on 24 February.

An hour later Russia launched its full-scale invasion of Ukraine.

Everyone rushed to the office, knowing Ukraine and neighbouring Moldova were facing a major vulnerability as their power systems were already operating in full isolation.

Later that day in Chișinău, Parliament reinstated the state of emergency for another two months, barely after having lifted it at the end of January.[9]

Ukrainian engineers who had gathered in the Ukrenergo Kyiv office understood the grid's control room was facing major security risks.

Historically, the grid operator had a reserve control room deep underground in the eastern part of Ukraine, close to the Russian border. During Soviet times, the Kremlin was preparing for military invasions coming from the West and pushing East towards Russia via Ukraine.

However, with increased US warnings of an imminent full-scale Russian invasion in the months preceding 24 February 2022, Ukrenergo's CEO Volodymyr Kudrytskyi and Andrii Nemyrovskyi, the company's senior manager responsible for digital solutions, agreed to move the control room to an alternative location.

The relocation happened in total secrecy in the months preceding the war, with only the two men being aware of it.[10]

Mariia Tsaturian, Ukrenergo's former head of communications,

23 Feb 2022
1st Disconnection Begins

Ukraine's Burshtyn Energy Island disconnected first—it had been synced with ENTSO-E since 2002.

24 Feb, 01:32 EEST
Final Unplug

Ukraine fully disconnected from Russia; frequency held steady at 50 Hz.

24 Feb, 04:00 EEST
War Begins

Russia launched full-scale invasion one hour after decoupling—grid was in full isolation.

Moldova Reinstates Emergency

State of emergency was reinstated just weeks after being lifted.

Pre-War
Control Room Relocated

Ukrenergo secretly moved grid control center due to invasion threats—only two people knew.

recounted how on 24 February, the cyber-attacks on the Ukrenergo IT infrastructure were three times higher than all the attacks combined that the company had suffered in the three years prior to the start of war.

Meanwhile, as Russian tanks were rolling in and airplanes were dropping bombs on Kyiv, Ukrenergo engineers were facing the difficult question of what to do with the isolation of the power system, carrying an immense responsibility not only for the security of Ukraine but also that of Moldova.

Volodymyr Kudrytskyi decided to instruct the chief dispatcher to start changing the operational regimes of thermal power plants in line with ENTSO-E requirements and collect all the necessary data.

The situation was critical. Russia was bombing civilian infrastructure and Ukrenergo's engineers feared losing parts of the transmission grid but Volodymyr Kudrytskyi knew this was the only chance for Ukraine and Moldova to synchronise with ENTSO-E.[11]

He asked the chief dispatcher to consider his request and went to the government to propose Ukraine's total disconnection from the Russian and Belarusian systems.[12]

When he returned, he asked the chief dispatcher if he had considered carrying out the tests but, to his surprise, the regime tests had already been completed.

Shortly afterwards, Ukrenergo notified its Moldelectrica colleagues of its decision not to reconnect with the IPS/UPS Russian and Belarusian systems, which was scheduled for 26 February.

Moldelectrica followed the instructions issued by its Ukrainian colleagues but said it had issues balancing the system.

Prior to 24 February, Ukrenergo was in charge of guaranteeing balancing services for the Ukrainian–Moldovan electricity bloc but with the risk of Ukraine's major nuclear power plants being disconnected because of the war, it had to start optimising the system itself.

Throughout the isolation period, it was facing surplus energy production at night, which had to be evacuated in Ukraine only to be returned to Moldova during daily peak hours.[13]

In Ukraine, Ukrenergo engineers started to feed the test data to ENTSO-E, which European colleagues found exemplary, barely able to believe that Ukrenergo could keep a steady frequency under conditions of unprecedented difficulty.[14]

Antonio Albino Marques, coordinator for the Continental Europe region of ENTSO-E, who was also in charge of the taskforce supervising the Ukrainian–Moldovan synchronisation at the time, confirmed the Ukrainian Ministry of Energy notified ENTSO-e of its decision not to reconnect to the Russian grid on 26 February.

Ukrenergo and Moldelectrica followed with requests for emergency synchronisation on 27 and 28 February respectively.[15]

Nevertheless, the situation in Ukraine and Moldova was becoming very difficult.

By the beginning of March, Russian troops claimed control of Ukraine's 6GW Zhaporizhzhia nuclear power plant, Europe's largest nuclear facility, and of the 2.85 GW Zhaporizhzhia thermal power station nearby in the southeastern city of Enerhodar, jeopardising not only the safety of the electricity system but also of the entire country as troops were shelling the nuclear plant.

Meanwhile, as Russian attacks intensified, Ukrainian children, women and elderly people started to stream into neighbouring countries, including Moldova, even as Moldova's own security was hanging by a thread and the power grid was exceptionally vulnerable.

Seeing the pressure Ukrenergo employees were working under, colleagues at EU electricity grid operators stretched out a helping hand, offering shelter to their families in the Baltic countries, Finland, Germany and Poland.

Mariia Tsaturian recalled the gratitude of Ukrenergo employees, who could concentrate fully on their work knowing their families were by now in a safe place.

With the decision taken never to reconnect to the Russian and Belarusian grid, Ukrenergo and Moldelectrica employees were facing an anxious wait to receive the green light on connecting to the ENTSO-E system without having to carry out the additional summer test later in 2022.

The answer came during a European Council meeting on 28 February, when commissioner for energy Kadri Simson took the lead on requesting the emergency synchronisation of the Ukrainian and Moldovan systems.[16]

By 7 March, Ukrenergo and Moldelectrica were ready to synchronise with ENTSO-E and on 11 March the synchronisation was unanimously approved by all ENTSO-E Continental Europe electricity transmission system operators, one and a half years earlier than initially scheduled.[17]

Nevertheless, Ukraine's neighbouring Hungarian grid operator, MAVIR, requested a delay, claiming it had internal problems, including carrying out maintenance work in its control room.[18]

Once MAVIR had completed its renovation work a week later, Ukrenergo and Moldelectrica were given the all-clear for the synchronisation.

Triple the number... of cyberattacks

Ukrenergo faced three times more cyber attacks on 24 February than over the previous three years combined.

No Reconnection

Ukraine decided not to reconnect to Russian grid—test data impressed ENTSO-E officials.

Emergency Requests

Ukraine and Moldova formally requested emergency ENTSO-E synchronisation.

Nuclear Plant Captured

Russia seized 6 GW Zhaporizhzhia nuclear and 2.85 GW thermal plants, escalating risk.

On 16 March,

Ukrenergo started to link to the first lines connecting the country with Hungary and completed the synchronisation later in the day by connecting the 400 kV power line linking Isaccea to Vulcănești in Moldova.[19]

Mariia Tsaturian is convinced that if Ukraine and, indirectly, Moldova had not completed the synchronisation, the two countries would not have withstood the multiple attacks that Russia subsequently unleashed on the Ukrainian power system from 24 February 2024.[20]

Nevertheless, the challenges were set to continue well into the following weeks and months.

With Russian troops continuing to shell the Zhaporizhzhia nuclear power plant, which remained connected to the Ukrainian grid, Ukrenergo took the decision to switch off its units even if it was dangerous to lower the load and lose large swathes of generating capacity to the system.

Even so, Ukrainian engineers had succeeded in keeping the system intact despite the physical and cyber-attacks unleashed by Russia.

Marques recounted how one of the priorities for the 40-strong taskforce working on the synchronisation was to ward off cyber-attacks, which could have posed a real threat to the integrity of the entire ENTSO-E system.

The ENTSO-E team was racing against the clock, often working on Saturdays, Sundays or at night to ensure all data exchange protections were in place.

The interconnection involved carrying out large data exchanges between continental Europe and the Ukrainian–Moldovan bloc, which needed to be protected by transferring internet protocol addresses to a physically separate connection.

Marques said the safeguards that had been put in place were very secure, making it impossible for the system to be hacked.

Nevertheless, Ukrenergo's Mariia Tsaturian recalled how the company's IT specialists later discovered that Russia's Federal Security Service and the country's corporation for space activities, Roscosmos, had been trying to find gaps in the Ukrainian cyber defences to interfere with the systems but had not succeeded.[21]

Meanwhile, Moldova itself could have posed a major vulnerability to efforts to synchronise with ENTSO-E, with that risk being linked to Transnistria, a would-be breakaway province on the Left Bank of the River Nistru.

De facto controlled by Russia, Transnistria also has the 2.5 GW gas-fired power plant, MGRES, which generates most of the electricity used in Moldova, but which is operated by Russian electricity generator InterRAO.

Its electricity transmission lines are part of the Ukrainian–Moldovan electricity bloc and on 16 March 2022, the region synchronised with the ENTSO-E system at the same time as Ukraine and Moldova.

Interviewees at

Moldelectrica as well as Ukrenergo agreed that Transnistria could have sabotaged the synchronisation by interfering with substations or power lines but did not do so.

Alexandru Săndulescu, member of the EU High-Level Advisers Mission to Moldova for the energy sector, said Transnistria understood it was connected to the Ukrainian–Moldovan bloc and any interference could lead to its isolation.[22]

Nevertheless, Ukrenergo's Mariia Tsaturian said Ukraine had kept a very low profile even as it was intensely preparing for the ENTSO-E tests and subsequent synchronisation, which meant that Russia was less aware of the measures that were being put in place in Ukraine and Moldova.

She recalled that in the run-up to decoupling from the Soviet grid, Russian dispatchers repeatedly asked Ukrenergo employees whether they really wanted to disconnect while Belarussian engineers were offering to flow electricity via an old line connected to the Chernobyl nuclear power plant, which had been idle after the fateful explosion in 1986.[23]

At the same time, Moldovan secretary of state Constantin Borosan insisted Transnistria did not know of Moldova's synchronisation plans and said that any sensitive data shared with the Russian-controlled MGRES 2.5 GW power plant in the province may have been blurred.[24]

17 March 2022. Moldelectrica dispatching centre. The second day after the Moldovan and Ukrainian electricity transmission systems synchronised with ENTSO-E.

In the picture: Alexandru Săndulescu, EU High-Level Advisers Mission to Moldova, Veaceslav Zastanevțchi, deputy director Moldelectrica at the time, Iurie Cazacu, director, Constantin Borosan, secretary of state in the Ministry of Infrastructure and Regional Development.

Transnistrian grid and power plant operators Dniestrenergo and MGRES may also have understood they could not undermine the synchronisation process because the province is wedged between Ukraine and Moldova and, geographically speaking, it had no option other than to align with the two.

After the synchronisation, Switzerland's Swissgrid and Amprion, one of Germany's four electricity transmission system operators, were monitoring the frequency in the Ukrainian–Moldovan bloc as there was always a risk of disconnection linked to the war.[25]

Moldelectrica's Iurie Cazacu said Ukrenergo was very well-prepared, a view that was also echoed by ENTSO-E's Albino Marques, who praised all engineers who had worked on the project for their unrivalled motivation and desire to achieve success, despite the long hours and extremely challenging conditions.

However, Cazacu admitted there had been unintended flows from Moldova to Ukraine, which meant that after years of delays, Moldelectrica had no option other than to get ready to introduce daily balancing and settlement arrangements later that summer.

Although Moldova itself had to implement 204 technical measures, of which only a quarter had been put in place, the synchronisation was also very valuable, providing security of supply later as Russian attacks began to target Ukrainian infrastructure, seeking to fragment the grid and plunge the Ukrainian–Moldovan bloc into darkness.[26]

SECURING SUPPLY

While the synchronisation had been a success, a new set of problems was looming on the horizon for Moldova.

An annual agreement for cheaply priced electricity supply signed with MGRES expired and there was a pressing need to renew it, not only because commercial flows with the ENTSO-E region were not ready yet but also because the price of electricity across Europe was beginning to rise as Russia was curtailing gas exports to western buyers, hoping to undermine western support for Ukraine.

As MGRES refused to renew the agreement for another year, opting to extend it on a monthly basis, Moldova had to allocate significant human resources to negotiating with the Transnistrian counterparts.

Secretary of state Constantin Borosan said the Transnistrian counterparts were deliberately trying to slow down negotiations, asking, among other things, for derogations to restrictions which did not allow them to use the banking system.

He also recalled how, during one of the discussions with MGRES, company representatives bluntly admitted they had been waiting for Russian troops to occupy Ukraine and enter Transnistria within days of the start of the full-scale invasion.[27]

Nevertheless, by June 2022, Ukraine could start exports to Moldova for the first time since the ENTSO-E synchronisation on 16 March 2022.

For the first time ever, Moldova's state wholesaler Energocom secured a contract with Ukrainian hydro producer Ukrhydroenergo, which booked 80-150MW of cross-border capacity after commercial exports started on 12 May 2022.[28] The contracts were facilitated by the Energy Community's shuttle diplomacy service, which mediated support from the Ukrainian Ministry of Energy and the Moldovan Ministry of Infrastructure and Regional Development.[29]

The deal was also a first for Ukrhydroenergo, which had never exported electricity and was not familiar with the process.[30]

The deal was of critical importance both for Ukraine and for Moldova, securing access to income for Ukrhydroenergo at a time when Ukrainian companies were already beginning to grapple with war-related cashflow issues and Moldova was struggling to negotiate longer-term supply contracts with MGRES.

In 2021, around 80% of electricity demand on the Right Bank of the River Nistru was covered by MGRES and the remaining 20% was sourced in Moldova itself.

However, with the newly secured Ukrainian imports, which covered 24% of demand at the time, MGRES's supply as a share of overall consumption fell to 56%.

The Ukrainian imports sold by Ukrhydroenergo helped Moldova not only to diversify and reduce dependence on Transnistria but also provided a cheap source of energy, keeping Energocom's purchase basket price at the time at USD 67.00/MWh (EUR 64.60/MWh).[31] To compare, European baseload spot prices at the time were hovering around EUR 200.00/MWh.

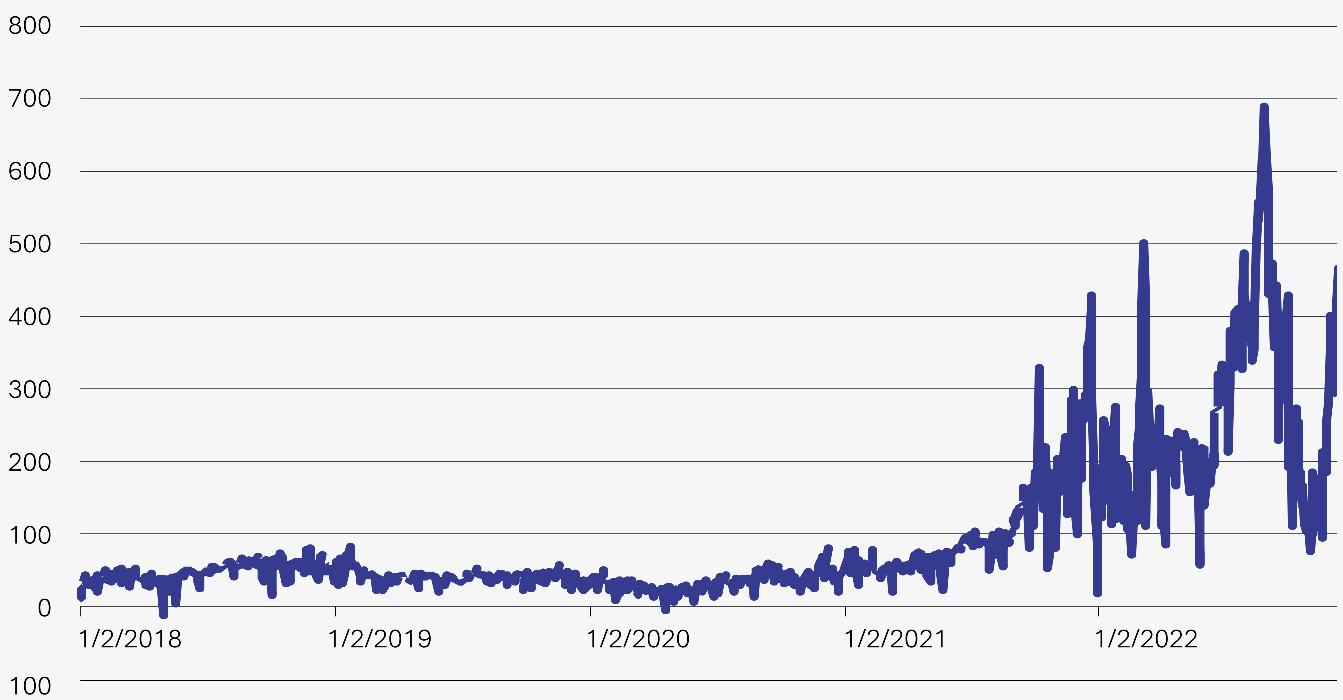


Figure 9. German day-ahead electricity baseload prices in EUR/MWh
Source: ICIS.

In February 2022,

lawmakers amended Electricity Law 107/2016, requiring suppliers to buy electricity from at least two sources as a measure to increase security of supply.

There was also an attempt to organise auctions, which failed because MGRES was offering prices at the level of Ukrainian suppliers, hovering around USD 96-97/MWh.[32] After that a public service obligation was imposed on Energocom.

Shortly after securing the Ukrhydroenergo supply deal, Energocom also signed an agreement with Ukraine's nuclear producer Energoatom, which, just like Ukrhydroenergo, had never exported electricity and did not have any experience in cross-border flows.[33]

As a result, in addition to the Ukrhydroenergo contract, Energocom concluded an additional supply agreement with Ukraine's nuclear producer, Energoatom, which confirmed at the beginning of June it had reached an agreement[34] for the supply of 85.2 gigawatthours (GWh) of electricity at USD 77.00/MWh.

The price was higher than the cost of deliveries from MGRES, which was hovering around USD 60.00/MWh,[35] but still cheaper than European market prices, which were spiking as Russia continued cutting gas deliveries to European buyers.

With the two contracts in place, Moldova was now sourcing 30% of its electricity needs from Ukraine and the remining 70% from MGRES.

Artur Lorkowski said the monthly contracts had been of extreme importance to the Energy Community's Contracting Parties Ukraine and Moldova because they were seeking to provide security to both countries in a very insecure environment. More precisely, Moldova saved money by buying cheaper electricity than in the EU and improved its negotiating position with MGRES while Ukraine itself could export excess production, thereby generating income.

He noted that there had been regular discussions at political and company levels to ensure the contracts were renewed and added that the Energy Community provided its full support for the agreements throughout that period.[36]

Imports from both Ukrainian sources continued until October as Energocom itself was obliged to procure and sell electricity as part of bilateral contracts to the system operator Moldelectrica, to suppliers of last resource and universal service providers during the ongoing state of emergency.[37] Nevertheless, flows were discontinued from 11 October 2022 following massive Russian strikes on the Ukrainian energy system which started the day before.

BALANCING THE SYSTEM

Over the summer,

baseload consumption was ticking along at 330 GWh, while peak hours could double but Bînzari said Energocom was sufficiently well-supplied to cover all the demand at the time.[38]

Nevertheless, one of the most challenging issues facing both Energocom and other suppliers was to forecast their load and ensure the system was balanced.

It became clear that Moldova needed to take urgent action to introduce its much-delayed balancing market. Accordingly, the decision was taken to roll it out on 1 June 2022.

Up until then, Moldova had been relying on Ukraine to balance the entire Ukrainian–Moldovan electricity bloc and suppliers as the grid operator had no experience of how to optimise the system.

However, as Moldova could not balance the system and had no financial instruments to compensate unintended imbalances, Ukrenergo made it clear it could not assume the responsibility of compensation for the full bloc.[39]

Moldova's demand-supply profile had also been changing in recent years .[40]

Demand had risen 7.5% to 290 million KWh in 2021 compared to the previous year, with a 5.7% rise seen in household demand and a 9% increase from non-residentials.

Meanwhile, the electricity generated from renewable sources increased to 116.6 million kWh, which represented a 43.3% rise on the previous year.

The bulk of renewable generation came from wind installations, which covered 65.5% of the green energy; the total installed wind capacity at the time stood at 103.8 MW, which represented a close to 90% increase on the previous year.[41]

All that meant Moldova had to follow in Ukraine's footsteps, which launched its own electricity balancing market in 2019, and adopt similar arrangements, skipping intermediary steps such as working with monthly settlements, which would have helped to ease suppliers into the new system.

On 1 June 2022, Moldova launched the new mechanism for hourly imbalances, which was due to be operated by Moldelectrica and aligned with a financial settlement mechanism for unintended deviations between transmission system operators, applied in Europe via the FSkar mechanism.

Moldelectrica became indirectly subject to the requirements of the mechanism via a bilateral agreement with Ukrenergo, which was liable outright to comply with the conditions of FSkar.[42] [43]

Internally, however, Moldova faced several major challenges.

Firstly, it was expected to establish a mechanism to collect the money for imbalances, which would then be used to compensate counterparties.

A second challenge related to the fact that although Transnistria's MGRES was also causing imbalances, local authorities were refusing to join the Moldovan balancing and settlement mechanism.

Thirdly, suppliers were not prepared for the new market arrangements. Many renewable producers had brought in second-hand equipment from Europe and were operating small wind farms with installed capacities of below 1MW.

Moldelectrica's Iurie Cazau recalled how the operator, together with the regulator ANRE, had organised multiple training workshops but participants found it difficult to grasp the new rules, because many of them were not electricity market specialists.[44]

Fourthly, after years of paying for imbalances calculated based on monthly meter readings, suppliers were told to forecast their positions.

Finally, to establish a functional balancing market, Moldovan producers were expected to join as participants and form a balancing group. However, the largest supplier in the country, MGRES, refused to do so because it disagreed with the new market-based model.[45]

When Moldova finally switched to the new daily balancing market, some participants struggled to align with the new rules but other renewable producers found the new system could work to their advantage.[46]

Some wind generators were no longer looking to sign bilateral contracts with consumers and were nominating zero production in their forecasts only to supply electricity to the system later on, leading to positive imbalances.

As the European balancing reference value that was used in Moldova tracked European spot prices, some producers found themselves in a privileged position, receiving high compensation.[47] That was mainly due to the fact that electricity prices were soaring to record levels at the time because of Russian-induced gas curtailments on European markets.

Moldelectrica's Cazacu said some of the surplus energy was being evacuated to Ukraine, which was itself struggling to balance the market because it had nuclear capacity that could not be easily ramped up or down.

Two years on from the launch of the balancing market, Moldelectrica is still unable to control its imbalances as it lacks appropriate infrastructure and has been working with the Moldova Energy Security Activity (MESA), a programme funded by USAID, whose goal had been to provide policy solutions.[48]

Speaking for this study, Nikos Tourlis, managing director, Europe, at Tetra Tech, the international consultancy implementing the MESA programme, added that the country had also struggled from the beginning to attract suppliers to establish certified balancing groups.[49] [50]

Nevertheless, he said the situation could change as MESA and Moldelectrica were working to establish certified balancing groups to include thermal heaters as well as the 2.5 GW MGRES plant but the success of the project depended on changing the way electricity is offered to the market to ensure suppliers are incentivised to do so.

Finally, another obstacle to Moldova's emerging balancing market has been linked to the way value added tax (VAT) is charged.

In contrast to EU Member States, Moldova has been applying the levy on producers rather than consumers, making it very difficult for Moldelectrica to calculate imbalances.[51]

Moldovan fiscal regulations stipulate VAT is applied to domestically produced energy while imported energy supply and energy produced at the MGRES plant have been exempt, even though the latter is *de jure* under Moldovan control.

Fiscal regulations were being changed at the time of writing the report in 2024 to align them with EU rules but ANRE's Ursu said the added VAT complications made it particularly difficult for Moldova to transition to a functional balancing market when it was introduced in summer 2022.

In hindsight, however, Moldova's synchronisation with the ENTSO-E system and much-delayed launch of the balancing market were arguably some of the biggest achievements made in its energy sector since the country gained its independence in 1991.

Those achievements were crowned by another major success in June, when Ukrenergo announced the first auctions for commercial flows between the Ukrainian–Moldovan bloc and neighbouring Romania since the full ENTSO-E synchronisation in March.[52]

Despite very difficult war conditions, Ukraine and Moldova launched their first commercial exports as a bloc, with Ukraine selling electricity to Moldova and neighbouring ENTSO-E countries throughout the summer months.

Matters, however, were about to take a turn for the worse for Moldova as the country was approaching the heating season and Europe was facing an unprecedented energy crisis.

Consult this chapter endnotes at page 202.

330 GWh
Baseline Summer Consumption

During the summer, Moldova's baseline electricity consumption held at 330 GWh, with peak hour demand doubling that level.

7.5%
Annual Demand Increase in 2021

Total electricity demand rose to 290 million kWh in 2021, with household usage up 5.7% and non-residential demand up 9% year-on-year.

103.8 MW
Installed Wind Capacity

Wind power accounted for 65.5% of all renewable electricity, with installed wind capacity reaching 103.8MW in 2022, marking a nearly 90% increase from the previous year.

Balancing Market Launch

Moldova launched its hourly imbalance settlement mechanism on 1 June 2022, aligning with EU standards and shifting away from monthly readings.

5

CHAPTER

Preparing for winter 2022/23

The synchronisationof the Ukrainian and Moldovan electricity grids with the ENTSO-E system in March 2022 brought a measure of security for the two countries, providing the possibility to access electricity supply from continental Europe.

Nevertheless, the events that were to unfold following Russia's full-scale invasion of Ukraine on 24th February 2022 would trigger shockwaves across the region.

Immediately after the invasion, Moldova faced a series of challenges ranging from a surge in Ukrainian refugees displaced by war to an emerging deficit in oil products caused by disrupted supply chains to longer-term fears of a new gas crisis later that winter.

With limited human and financial resources, the country had to turn to western partners to strengthen relations amid urgent need for support.

Specialists working on projects funded by the US Agency for International Development (USAID) had, up until the beginning of 2022, been involved in introducing the local energy watchdog ANRE to the principles of the EU's Regulation on Wholesale Energy Market Integrity and Transparency (REMIT).

Nikolaos Tourlis, managing director Europe at consulting firm Tetra Tech, which was funded by USAID to work on regional projects, said the firm did not have a prominent role in the country by the time Moldova experienced its first gas crisis in October 2021 and was concentrating on the electricity sector.[1]

Moldova had been of collateral interest to international donors up until the start of the war as Ukraine was at the centre of attention and regional countries such as Moldova received only limited resources to develop energy-related projects.

However, with the start of the Russian invasion of Ukraine and fears of a regional spillover, it became clear that Moldova was very vulnerable and had to tighten its security of electricity and gas supplies.[2] A few country-specific USAID initiatives, such as Moldova Energy Security Activity (MESA) and Connect for Growth (C4G), were set up to drive a number of activities.

Tourlis said priorities related to ensuring successful synchronisation with the ENTSO-E system and making use of the summer months of 2022 to create gas stocks and prepare electricity supply plans to make sure Moldova would be able to withstand a future energy crisis during the upcoming cold season.

By March 2022, the project had received USD 17 million in technical assistance, with the specific goals of developing and adopting a national strategy to strengthen energy security, establish an independent electricity market operator in line with international best practices, increase investments in renewable and efficiency projects and save up to six kilotonnes of oil equivalent (ktoe) through energy efficiency enhancements at industrial, commercial and residential levels.[3]

EBRD CREDIT LINE

While prior to the war Moldova could only attract limited international funds, particularly from the EU, after the invasion it began to pull in significant amounts of cash, including from USAID, which increased investments in energy assistance support to USD 300 million by the middle of 2024.[4]

In parallel, the Moldovan government was discussing the possibility of securing a revolving credit facility[5] from the European Bank for Reconstruction and Development (EBRD), which would guarantee the necessary funds to buy natural gas ahead of winter.

The bank had been in talks with the Moldovan government in 2019 about the possibility of providing a financial instrument to help the country secure natural gas in case the shipment of Russian volumes via neighbouring Ukraine were stopped at the end of the then expiring transit contract.

Nevertheless, although the financial agreement was signed at the time, it was never ratified and eventually lapsed as the transit agreement was in fact renewed for another five years.

Even though the credit line was not used, Moldovan authorities already had some experience of working with EBRD and by the time the first energy crisis hit in October 2021 as Russia refused to supply more gas, they turned to the bank with a plea for support.

Work on preparing the instrument started at the end of 2021. By March 2022 it had been approved by the EBRD Board but the core tasks involved preparing the state wholesaler Energocom to receive the credit.

A first step involved introducing corporate governance rules and transparent accounting standards, as well as securing the intellectual capacity to transform the company into a credible entity with suitably trained gas traders.

One of the biggest problems facing Moldova's energy sector which was reported by all interviewees was a lack of local specialists with the relevant professional experience and understanding of markets and trading.

To plug the skills gap, several foreign experts were brought in, including Maciej Woźniak, former deputy president of the Polish oil and gas company PGNiG-Orlen between 2015-2020.

By early 2022, when he got a call from Artur Lorkowski, director of the Energy Community, Woźniak was no longer actively involved in the Polish gas sector.

Artur Lorkowski, director of the Energy Community

He accepted the challenge to travel to Moldova to work as an EU senior non-key expert to Energocom as part of the high-level advisory mission to the country.

The position proved taxing from the very beginning as one of the priorities was to hire fluent English speakers with knowledge of energy markets.

One of the key objectives was preparing for winter by locking in volumes for storage injection in Romania and Ukraine but the task posed major internal and external challenges.

At the domestic level, Woźniak had to explain the technical details of storage installations in Ukraine and Romania to policymakers, pointing out the differences between the two in terms of gas withdrawal flexibility and costs.

The Moldovan Ministry of Infrastructure and Regional Development had been in talks with the Romanian Ministry of Energy to increase the operational balancing account (OBA)[6] to the maximum possible level at the Iași–Ungheni interconnection point between the two countries. The increase was expected to allow Moldova to store gas in the transmission pipelines and access it in case of security of supply risks.

Furthermore, in spring 2022, the Commission for Exceptional Situations issued a customs tax exemption for volumes that were being exported by the incumbent Moldovagaz and placed under the OBA account.[7]

Nevertheless, Woźniak explained to Moldovan officials that Ukraine could offer even greater flexibility not only in terms of storage injections and withdrawals but also in terms of cheaper storage tariffs.[8]

Another priority for Woźniak and Moldovan officials was negotiation of the EBRD loan and organising the pre-qualification of counterparties to participate subsequently in Energocom's tenders.

USAID Support

USD 300 million invested in Moldova's energy by mid-2024.

EBRD Credit Line

EUR 300 million facility approved in March 2022.

Gas Purchase

257,250 MWh (24.5 mcm) bought on 23 May 2022.

Pre-qualification Results

Only 3 of 17 companies met tender criteria.

OBA Expansion

Pipeline storage capacity boosted at Iași–Ungheni.

Foreign Expertise

Former PGNiG VP Maciej Woźniak joined Energocom as EU advisor.

Market Gap

Lack of local trading specialists led to foreign expert hires.

The C4G project sponsored by USAID was designed to help with the pre-qualification of companies that could take part in upcoming tenders.

Lucian Indrieș, a Romanian-based lawyer who worked on the project, said its scope related primarily to performing due diligence on applicants, as well as help counterparties negotiate master agreements developed by the European Federation of Energy Traders (EFETs), which are widely used across European countries but were unknown in Moldova and had to be adapted to EBRD requirements.[9]

A first round of pre-selection was held in mid-April, when 17 companies expressed interest but only seven actually applied.[10] Only three companies were selected, namely DXT International, EP Commodities and PGNiG Supply & Trading, while the remaining four were rejected because they were not compliant with key requests such as proving experience in supplying a minimum volume of 150 mcm annually.[11]

To guarantee more competition, a second round of pre-qualification was organised the following month, when four more companies were pre-selected.[12]

However, even though the pre-qualification rounds were completed and the EUR 300 million instrument[13] was approved by the bank's board in March 2022, neither Woźniak nor government officials were convinced it would be needed.[14]

A first purchase using internal funds was initiated on 23 May 2022 following an order from Moldova's Commission for Exceptional Situations (CSE), a legal structure which had been set up to adopt provisions to manage the challenges related to the influx of refugees, the energy crisis and other threats to national security.[15]

The gas, amounting to 257,250 MWh (24.5 mcm) was bought from the incumbent Moldovagaz, which was storing it as part of OBA and was required by CSE to sell to Energocom.[16]

MESA's Nikolaos Tourlis confirmed there had been a delay in using the revolving credit facility because many decision makers were hoping gas prices on international markets would fall over spring and summer, which would have meant that Moldova might not have needed the loan.[17]

Woźniak was convinced at the time that Moldova could buy volumes from its own resources rather than using the credit prepared by EBRD.

However, expectations of falling gas prices failed to materialise in the months following the start of the war as Russia began to cut supply to European buyers, seeking to undermine western support for Ukraine.

EUROPE'S ENERGY CRISIS

European hub prices had been on an upward trend since the second half of 2021, as post-Covid energy demand was recovering and buyers were asking Gazprom to sell more volumes in addition to gas delivered as part of long-term contractual obligations.

Despite the surging consumption, the Russian producer refused to meet Europe's additional demand, sparking fears Moscow was trying to blackmail Europe into approving the delayed Nord Stream 2. The project was expected to see all gas supply transiting Ukraine to the newly built subsea lines connecting Russia to Germany via the Baltic Sea.

!

Concerns turned to panic in late summer 2021, when it became clear that Gazprom was failing to inject gas in underground facilities it operated in Germany, creating a dangerous storage deficit ahead of the cold season.[18]

By the time Russia invaded Ukraine, European hub prices had increased nearly sixfold compared to the start of 2021 but by spring and then summer 2022, they simply exploded to reach ever new record highs.

In mid-May 2022, the Ukrainian gas grid operator GTSOU declared force majeure on transit gas entering the country via the eastern Sokhranivka border point, which had fallen under Russian control and there were reports that deliveries were being diverted to the occupied territories.

GTSOU declined to assume responsibility for potentially missing supply earmarked for European buyers but offered instead to reroute volumes to the other entry point for Russian gas at Sudzha. Gazprom refused to do so and decided in fact to limit deliveries even here.[19]

Shortly after the decline in transit flows via Ukraine, gas exported via the existing Nord Stream 1 pipelines also started to drop throughout most of the summer and was stopped indefinitely at the beginning of September 2022. Gazprom claimed at the time that a turbine which was needed to operate the lines and which had been in maintenance in Canada could not be returned because of international sanctions.[20]

By 26 September news reached markets that three of the four Nord Stream 1 and 2 pipelines had been sabotaged amid a series of underwater explosions and natural gas began escaping to the surface close to the Danish island of Bornholm.[21]

The sharp drop in flows via Ukraine and later Nord Stream 1 throughout summer 2022 pushed European hub prices to all-time highs, triggering an unprecedented energy crisis, which would send shockwaves through the EU economies, leading to inflation and hitting the bloc's industrial base.

Equally problematic was the extreme volatility of price movements throughout this period, which made it impossible for companies to draw up strategies and mitigate the risks they were exposed to.

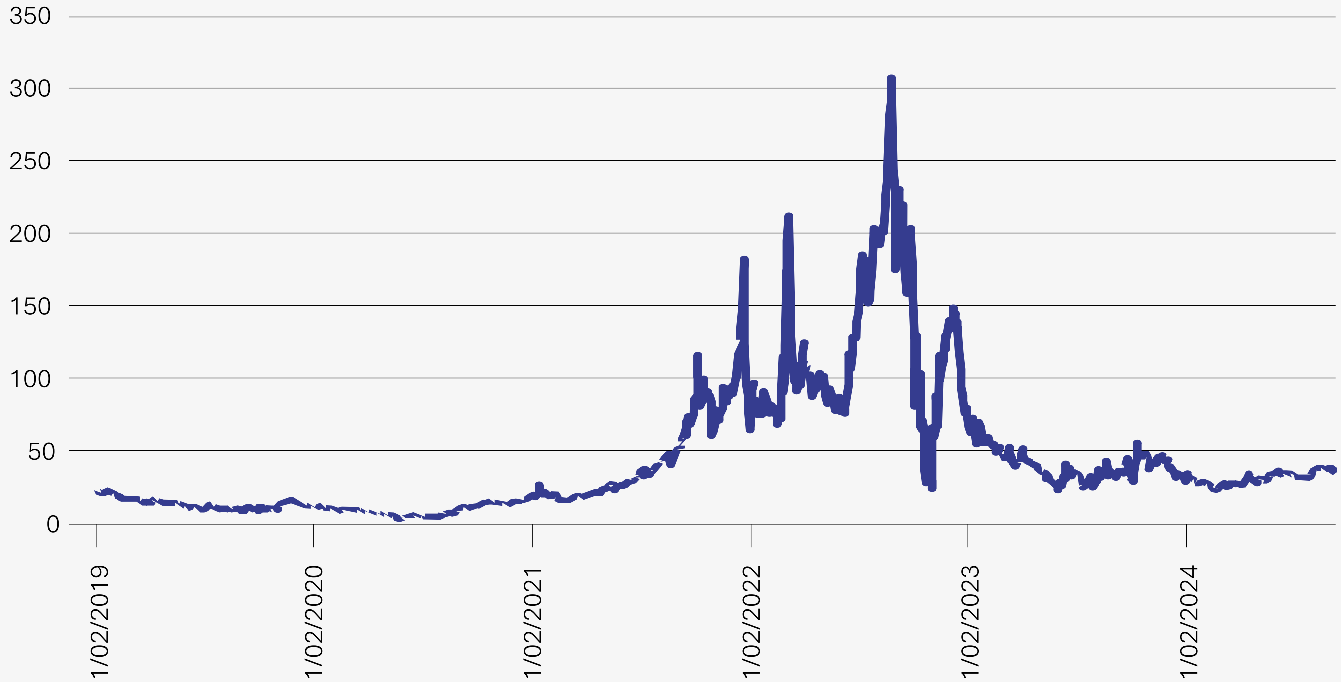


Figure 10. **Benchmark Dutch TTF day-ahead gas prices in EUR/MWh**

Source: ICIS.

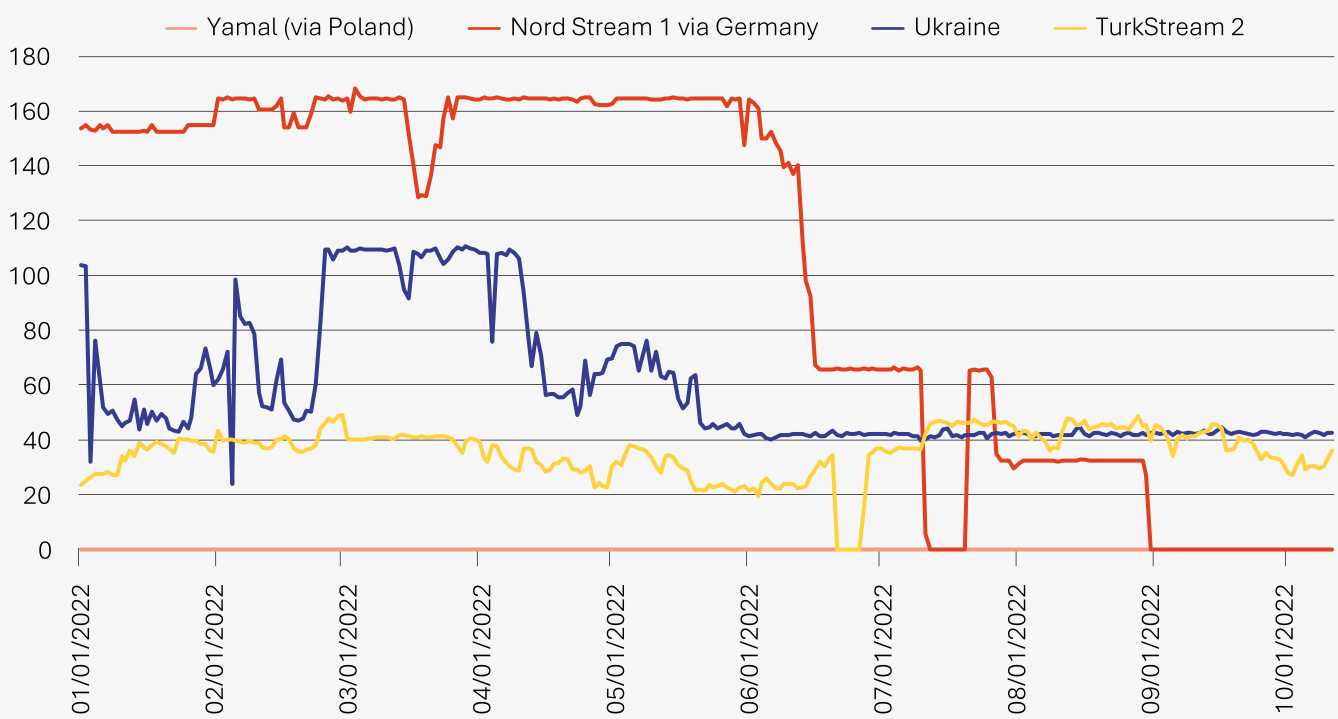


Figure 11. **Russian gas flows to Europe in 2022 in million cubic meters/day**

Source: European gas grid operators.

IN THE EYE OF THE STORM

Moldova was caught in the middle of the storm. Woźniak recalled how at the beginning of August 2022 trading gas seemed more like casino gambling even as Moldovan decision makers were alarmed at the "craziest" price moves seen on markets.[22]

Maciej Wozniak, European Union senior non-key expert for Energocom JSC.

One of the key decisions taken by the Commission for Exceptional Situations (CSE) was to order Termoelectrica to buy 190 million tonnes of heavy fuel oil. To minimise the impact of rising costs on end-consumers, the government agreed to exempt the fuel from value added tax.

For the first time in history, CET-2, the second and biggest unit of Termoelectrica switched fully to oil imported via the Izmail and Reni Ukrainian ports on the Danube as well as the Romanian Galați port, also on the Danube.[23]

Nevertheless, decision makers knew the country's window of opportunity to secure gas stocks ahead of the heating season was shrinking and had to take swift action to ensure there were sufficient volumes in storage.

Although prices were starting to reverse some of the upward trend by the beginning of autumn, they were still higher than in previous years, making it expensive to buy volumes on free markets.

That was particularly true for Moldova, which renewed discussions with EBRD, asking for the EUR 300 million revolving credit line to be reinstated after requesting it to be put on hold earlier that spring.

The EBRD facility was due to be signed by the Moldovan government and the bank in mid-July.[24] Just as preparations were being made, the manager of Energocom, as recipient of the credit, stood down, claiming old age.

Instead, Victor Bînzari who had joined the company earlier in spring was appointed interim director-general.[25]

Under the EBRD loan, gas supply could be delivered at Moldova's border points with Romania either via the Iași–Ungheni interconnector or via the Trans-Balkan pipeline at Isaccea. Another delivery point was in Ukrainian storage. Later on, the agreement allowed for inclusion of the Budince border point between Ukraine and Slovakia, which Bînzari said was cheaper and easier to use as it allowed volumes to be short-hauled into Ukrainian underground facilities.[26]

As some of the pre-qualified companies were based in Romania, there were expectations that Energocom could secure volumes from that market.

Nevertheless, by the time the company was ready to start purchasing large volumes of gas, the Romanian government introduced a tax that would skim 98% of trading companies' monthly net revenues,[27] making it unprofitable to trade volumes particularly on the forward market.

ENTERING MARKETS

The biggest challenge for Energocom remained the elevated hub prices. Woźniak feared that even the EUR 300 million EBRD credit line might not be enough to buy sufficient volumes ahead of winter.[28]

However, as the heating season was approaching, Gazprom was once again beginning to threaten Moldova with gas curtailments,[29] adding urgency to the launch of the EBRD buy tenders, which could no longer be delayed.

The first auctions under the EBRD credit line were initiated on 17 October 2022 but were not immediately successful because even the pre-qualified companies were reluctant to cooperate given that prices were on a rollercoaster ride.[30]

Many regional traders told the author they had initial difficulties in pre-qualifying for the tenders and signing European Federation of Energy Traders (EFET) master agreements with Energocom, which provided the necessary legal framework to protect the interests of counterparties.

By mid-October, when the first tenders were initiated, Energocom had signed EFET master agreements with six companies, namely EP Commodities, PGNiG Supply & Trading, DXT International, ERU Europe GmBH, OMV PETROM SA and SNGN ROMGAZ SA. Meanwhile, following long negotiations, AXPO Ukraine LLC, which had pre-qualified earlier in spring, had to be replaced with mother company AXPO Solutions Switzerland because of war-related fears in Ukraine.

A separate offtake EFET agreement was also negotiated between Energocom and Moldovagaz, which was expected to buy the volumes purchased by the state wholesaler and supply them to local consumers.

Indrieș recalled the extensive discussions with Moldovagaz well into the early hours of the morning to negotiate the terms of the EFET master agreement requested by EBRD. He said it was often difficult for Moldovan counterparties to accept and adopt practices, which had been in wide use on European markets for many years.

In a meeting with the participation of the EBRD representative, Octavian Costaș, the USAID-linked representative, Lucian Indrieș, and the EU senior non-key expert for Energocom JSC for SA Energocom, Maciej Wozniak discussed the individual specifications of the EFET contract and the completion of the pre-qualification procedure for natural gas procurements on 11 August 2022. Source: Energocom.

Even Energocom, which is now a well-recognised regional player, had difficulties at the beginning in adapting to new ways of doing business. Indrieș said the company, which for years had been used to signing purchase contracts with MGRES, now had to negotiate EFET agreements.

Tender data subsequently published by Energocom show a large share of the transactions reported throughout the final months of 2022 were concluded with one regional company, namely ERU Europe GmBH.[31]

The company said its success in the tenders was linked to the fact it had a smaller margin appetite than its competitors and that it benefitted from US political risk insurance for gas storage in Ukraine and supply in Moldova, enabling it to deliver gas under volatile market conditions.[32]

The tenders for front-month deliveries subsequently drew public scrutiny because of the high prices paid by Energocom at the time but the company said purchase prices had been based on a fixed price set by the Agency for Public Property (APP), a government organisation which owns Energocom.[33]

Data published by Energocom show that between 23 May 2022 and 19 January 2023, Energocom secured 600 million cubic metres of gas at an average price of EUR 88.21/MWh (USD 928.96/1,000 m^3) as part of 55 transactions, 12 of which were initiated as part of orders by the Commission for Exceptional Situations, while the remaining 43 were carried out as part of the EBRD buy tenders.[34]

Most of the volumes secured as part of the purchase ordered by CSE were bought from Moldovagaz's OBA volumes but a handful of deals, also ordered by CSE, were also carried out with an undisclosed counterparty.[35]

EXPANDING REGIONALLY

Energocom's Victor Bînzari, who had become the company's interim general manager only in July, said the final months of the year were exceptionally busy not only in terms of organising tenders but also expanding its network of counterparties regionally and hiring more staff.

One of the key steps was for Energocom to open its subsidiary in Otopeni, a suburb of the Romanian capital Bucharest.

Shortly afterwards, the state wholesaler received its trading licence for natural gas and electricity, became a network user for electricity and natural gas and eventually also registered to trade on the Romanian state-owned electricity exchange OPCOM, which involved a complex bureaucratic procedure including submitting bank guarantees from the Romanian BCR bank.

Bînzari said Energocom could establish its presence on the Romanian market at an accelerated pace thanks not only to the emergency situation, which had been declared on the Moldovan market and enabled the government to fast-track key measures, but also thanks to Romanian authorities, which understood the difficulties that Moldova had been facing.[36]

Some of the interviewees recalled the genuine openness of the Romanian authorities, including the regulator ANRE, the electricity grid operator, Transelectrica and the gas counterpart Transgaz, to help Moldova.

Indrieș, who was himself involved in liaising between Moldovan and Romanian stakeholders, said in many instances ANRE, Transelectrica or Transgaz representatives were reaching out themselves and even offered to explain various procedures which Energocom had to sign up to in simple language.

Within a short period of time, Energocom managed to establish a daughter company in Romania, which allowed it to obtain a trading licence that could be used on other EU markets including Bulgaria and Greece, where Energocom, for the first time ever, secured gas imported via the Southern Gas Corridor and physically reversed it from Greece across the connecting Trans-Balkan pipeline via Bulgaria, Romania and Ukraine.[37]

Although Energocom had bought volumes which were later injected into Ukrainian and Romanian storage facilities by autumn 2022, the government was still concerned about another major crisis caused by Russian curtailments.

Mindful of the previous year's crisis, when Russia's Gazprom refused to increase supply at the start of the heating season on 1 October, the government also drew up three scenarios, looking at the possibility that gas deliveries would be cut by 35, 50 or 100% and estimating the deficit for each situation.[38]

Based on those scenarios, it set up a crisis plan to include preparations for alternative fuel supply to thermal and heating plants, inspections of supply units and reducing heating demand-reduction measures particularly in off-peak hours.[39]

The introduction of demand reduction measures and an unseasonably mild autumn and winter limited gas consumption, which fell 47% during the heating season starting on 1 October 2022 and ending on 31 March 2023, compared to the same period the previous year, while electricity demand dropped 10% over the same period.[40]

In addition to the disruption scenarios and related crisis plans, the government also introduced a public service obligation (PSO) in August 2022 for the state wholesaler to supply natural gas in case Russian deliveries to end-consumers via the state incumbent Moldovagaz were stopped.

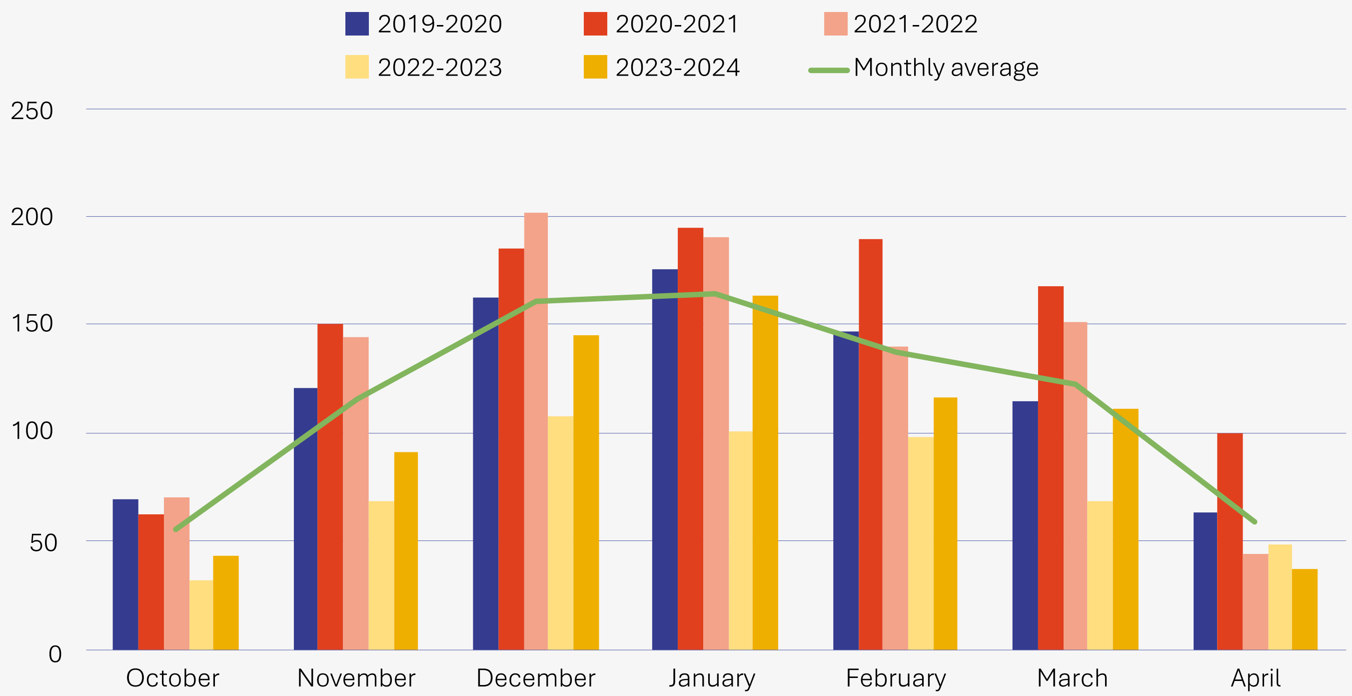


Figure 12. Average monthly winter consumption 2019-2023 in million cubic metres
Source: ANRE.

Similar arrangements had been made for the supply of electricity, as Energocom was tasked with purchasing electricity from the Transnistria-based MGRES thermal power plant as well as importing supply from Ukraine.

The latter had proved of great support after Ukraine and Moldova synchronised with the continental European power system earlier in March.

The first contracts following the ENTSO-E synchronisation were signed by Energocom with Ukraine's Ukrhydroenergo and Energoatom in spring 2022 and contracts were expected to run until the middle of October 2022.

However, by the start of October, Russia began targeting Ukraine's electricity infrastructure, destroying vast swathes of the transmission lines and aiming to fragment the transmission network.

With only a few days until the expiry of supply contracts signed with Energocom, Ukrainian officials announced to Moldova that they would stop deliveries.

In parallel, Gazprom decided to limit gas exports to Moldova, keeping deliveries flat at 5.7 mcm/day, even though demand for the Right Bank of the River Nistru can rise well above 8 mcm/day during the cold season.[41]

Just like in the previous year, when Gazprom also kept supply reduced by an estimated 30%, the Kremlin was once again using the Russian state company to exert political pressure on Moldova's pro-European government to discourage it from pursuing its European integration path.

Earlier in June, Moldova and Ukraine had received EU candidate status, indicating their determination to move away from Russia's political sphere of influence.[42]

However, Moldova was facing internal political turmoil, with the pro-Russian party of the exiled opposition politician Ilan Şor orchestrating street protests against the government amid rising electricity and natural gas prices. [43]

For the second year in a row, Moldova was bracing for a new crisis compounded by political turbulence, limited gas deliveries and the prospect of reduced electricity supply as Russia's attacks on the Ukrainian energy infrastructure were threatening to plunge the region into darkness.

However, the country was much better prepared than in the previous year, having secured sufficient gas supply, which it stored in Ukraine, widened its network of regional connections that could offer emergency support and consolidated Energocom by nearly tripling the number of employees from nine in 2021 to 25 by the end of 2022.

Consult this chapter endnotes at page 205.

CHAPTER 6

The second winter crisis

The start

of the heating season 2022-2023 brought a sense of déjà-vu to Moldovan energy stakeholders as Gazprom was once again exporting less gas than needed to cover rising winter demand.[1]

Exactly a year earlier, the Russian producer's decision to restrict deliveries had triggered one of the worst energy crises in Moldova's post-independence history.

Since then, the country had taken steps to improve its security of natural gas supply and reduce its dependence on Russia by buying alternative volumes on European hubs, clinching a critical EUR 300 million loan from the European Bank for Reconstruction and Development (EBRD) for gas purchases and preparing the state wholesaler Energocom to become an active regional trader.

Nevertheless, Moldova was still facing multiple vulnerabilities as winter 2022 was drawing in.

Russia's full-scale invasion of Ukraine in February 2022 and its decision to cut nearly 80% of natural gas supply to European buyers as it sought to undermine western support for Ukraine had led to an unprecedented energy crisis.

Gas and electricity prices spiralled out of control, reaching record levels, hitting end-consumers and lifting inflation rates across the continent.

Moldova was particularly hard hit by the energy crisis because, for years, successive governments had failed to increase end-consumer tariffs to align them with the purchase costs of gas.

That meant that by the time European hub prices started to soar at the end of 2021, the difference between tariffs and market prices was around MDL 1.8 billion (EUR 94 million, USD 101 million).[2]

Unlike many European countries where governments took measures to cap end-consumer tariffs, Moldova was forced to introduce gradual tariff increases to most consumers,[3] offering protection nonetheless to vulnerable categories identified according to well-established criteria.

Rising energy costs were speculated on politically by pro-Russian opposition groups, such as the party led by Ilan Șor, which began to organise multiple protests in the second half of 2022.

Meanwhile, soaring gas prices created problems even for the gas incumbent Moldovagaz, a company majority-owned by Gazprom, as the widening difference between gas import costs and end-consumer tariffs led to major cashflow issues.

The company had been selling surplus volumes to the state wholesaler Energocom throughout the spring and summer months, which helped it secure additional revenue to pay for Russian deliveries.

However, by the start of October 2022, the difference between import costs and revenue cashed in from end-consumers had widened to MDL 1 billion (around EUR 50 million at the time), just as Gazprom was pressing Moldovagaz to make advance monthly payments for deliveries.[4]

EUR 300M Loan, Still Exposed

Moldova secured an EBRD credit line, but remained vulnerable as winter gas supplies from Russia fell short again.

Gas Use Down 47%

Crisis measures and mild weather slashed national gas consumption nearly in half during the heating season.

Rescue for Moldovagaz

The government injected MDL 1 billion into Moldovagaz to prevent default amid widening import cost gaps.

80% Cut in Russian Gas

Russia slashed gas supplies to Europe by 80%, triggering record prices and intensifying Moldova's energy crisis.

Moldovan banks could not offer loans to help Moldovagaz pay its debt because of similar cashflow issues, forcing the incumbent to turn to the government to secure support.

To help tide the company over, the government tasked Energocom with providing a loan amounting to MDL 1 billion under a complex mechanism involving the state wholesaler, the Moldovan government and Moldovagaz.

As part of that arrangement, the government increased Energocom's share capital, allowing the state wholesaler to provide the loan to Moldovagaz, which, in turn, guaranteed repayment of the credit plus interest by pledging the full share it held in the share capital of the transmission system operator Moldovatransgaz, plus all movable assets that were part of the transmission network.[5]

Moldovagaz eventually repaid the loan at the beginning of 2023 but the start of the heating season turned out to be exceptionally challenging not only because of cashflow issues but also because of the Russian export limitations.

Vadim Ceban recalled how Gazprom's management was asking the Moldovan government for updates on an independent audit into Moldova's historic gas debt, which was due to be provided by 1 May 2022.[6]

SCRAMBLING FOR MONEY AND GAS SUPPLY

As 2022 was drawing to an end, the report, which had been agreed on by the Moldovan government and Gazprom when a new gas supply contract was negotiated in October 2021, had yet to be completed.

Independent international auditors had reportedly declined to carry out the audit amid claims the issue linked to Moldova's historic debt for Russian gas deliveries was too political.[7]

As a result, the government instructed its Public Property Agency (APP) in August 2022 to hire international auditors, namely the Norway-based Wikborg Rein law firm and UK-based Forensic Risk Alliance, to perform the independent audit.

When the two firms secured the contract to carry out the Moldovan debt audit, the initial completion date was set for 30 January 2023 but the deadline had to be pushed forward to 2 June 2023.[8]

Gazprom used Moldova's delay in submitting the audit to justify the limitations in gas supply, although interviewees insisted the producer's real motivation was to deter the country's pro-European government from pursuing EU integration goals.

The Russian producer was aware of the fact that Moldova was still vulnerable even though Energocom had secured a EUR 300 million revolving credit facility from EBRD earlier that summer.

Although the credit was approved and ratified in mid-July, Energocom was yet to start buying volumes at the beginning of the heating season.

By 1 October 2022, it became clear that Gazprom was only sending 5.7 million cubic metres per day, which was around 30% less for that time of year. However, by November the shortfall compared to demand on the Right Bank of the River Nistru would increase to 49% and by December it would soar to 56%.[9]

Even so, real concerns over a new energy crisis started to emerge in mid-October when Russia began to unleash massive rocket attacks on Ukraine's electricity infrastructure.

Earlier in mid-March 2022, Ukraine and Moldova successfully synchronised with the continental European electricity transmission system, after fully unplugging from the Russian and Belarusian grids to which they had been connected since Soviet days.

Following the synchronisation, Energocom secured two electricity supply contracts with Ukraine's state-owned hydro and nuclear producers, Ukrhydroenergo and Energoatom, which were renewed on a monthly basis and covered around 30% of demand on the Right Bank of the river Nistru.

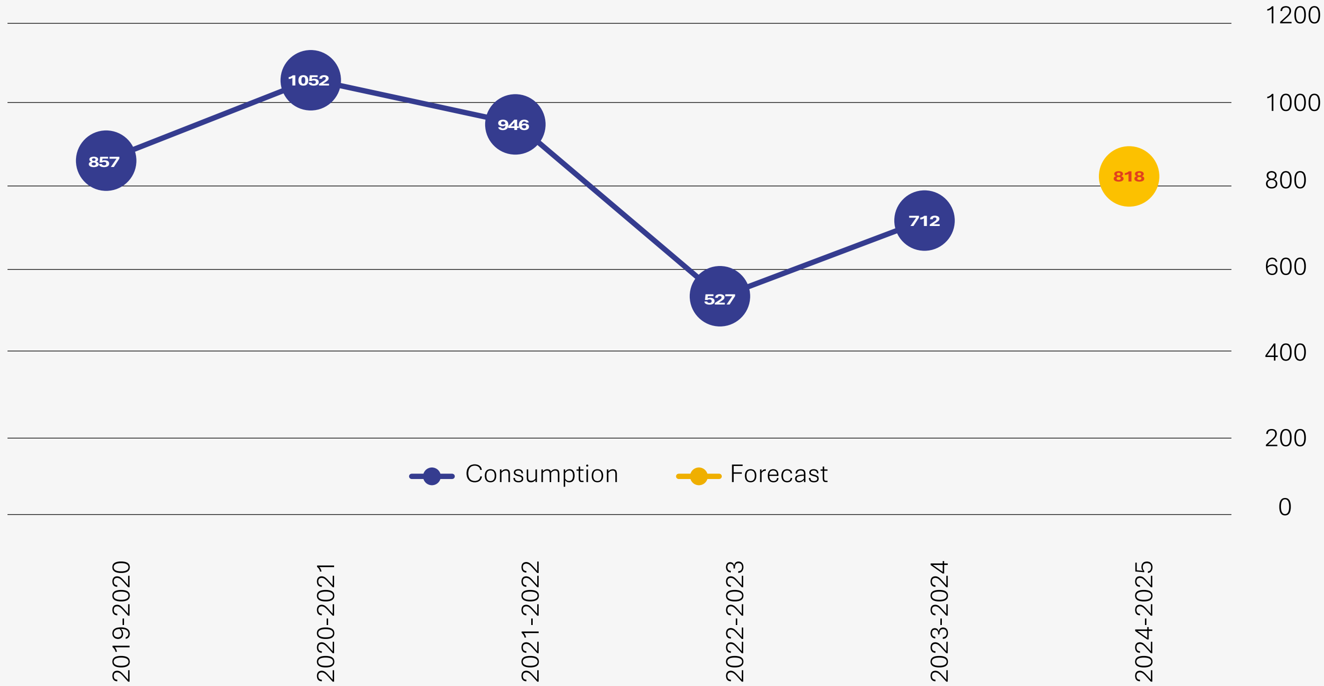


Figure 13. Winter gas demand on the Right Bank in million cubic metres
Source: Ministry of Energy.

At the start of October, when the contracts were due to be renewed, the Ukrainian companies told Energocom they were not able to extend them for more than 15 days following internal briefings from the Ukrainian intelligence services, which warned of imminent Russian attacks on the electricity infrastructure.[10]

Predictions came true on 10 October when Ukraine decided to suspend exports to Moldova and neighbouring EU countries with immediate effect after Russia launched a rocket attack, targeting the energy infrastructure and destroying around one gigawatt (GW) of generating capacity.[11]

News about the Ukrainian curtailment came as Moldovan government officials, including the minister for infrastructure and regional development Andrei Spînu and secretary of state Constantin Borosan, were visiting Azerbaijan.[12]

The decision was taken to task Energocom with reaching out to Romanian electricity producers to secure imports to plug the Ukrainian deficit but until new contracts were concluded, Moldova had to import expensive emergency flows, which were delivered on a technical rather than commercial basis.[13]

Within two days of the Ukrainian companies suspending flows to Moldova, the country was able to secure 100 MW of capacity to import electricity from neighbouring Romania via the sole existing 400 kV Isaccea-Vulcănești power line.[14]

The capacity was subsequently increased to 135MW and then to 235MW.[15]

On 13 October 2022, Moldova's Commission for Exceptional Situations (CSE) introduced a state of alert for electricity, exactly a year after a similar regime was introduced for natural gas[16] as it became clear the country was facing a major energy crisis caused by Russia's limited gas deliveries.

The state of alert introduced specifically for the electricity sector subsequently allowed the government to fast-track a series of measures that were necessary to ensure security of supply.

At the same time, the regulator ANRE introduced a decision to ban all electricity exports throughout the period covering the state of alert.[17]

In parallel, following discussions at government level between Moldova and Romania, the latter passed Emergency Ordinance 119 of 2022, which introduced a requirement for local producers to prioritise the sale of available output to traders or suppliers designated by the Moldovan government at capped prices.[18] Although not specifically named, the designated trader in this case was the state wholesaler Energocom.

That meant Moldova could start importing electricity as part of bilateral contracts at capped prices of EUR 90.00/MWh, more than three times cheaper than baseload spot prices on the Romanian state-owned exchange OPCOM at the time.[19]

56%
Gas Shortfall

By December 2022, Gazprom was covering less than half of Moldova's seasonal gas demand.

EUR 300M Credit,
Still No Gas

Despite securing a major EBRD loan, Energocom had not purchased volumes as the heating season began.

25 October 2022. Meeting of Commission for Exceptional Situations as Russia reduced gas deliveries to Moldova for a second winter in a row. In the picture: Constantin Borosan, secretary of state in the Ministry of Infrastructure and Regional Development wearing a scarf amid reduced heating in the room.

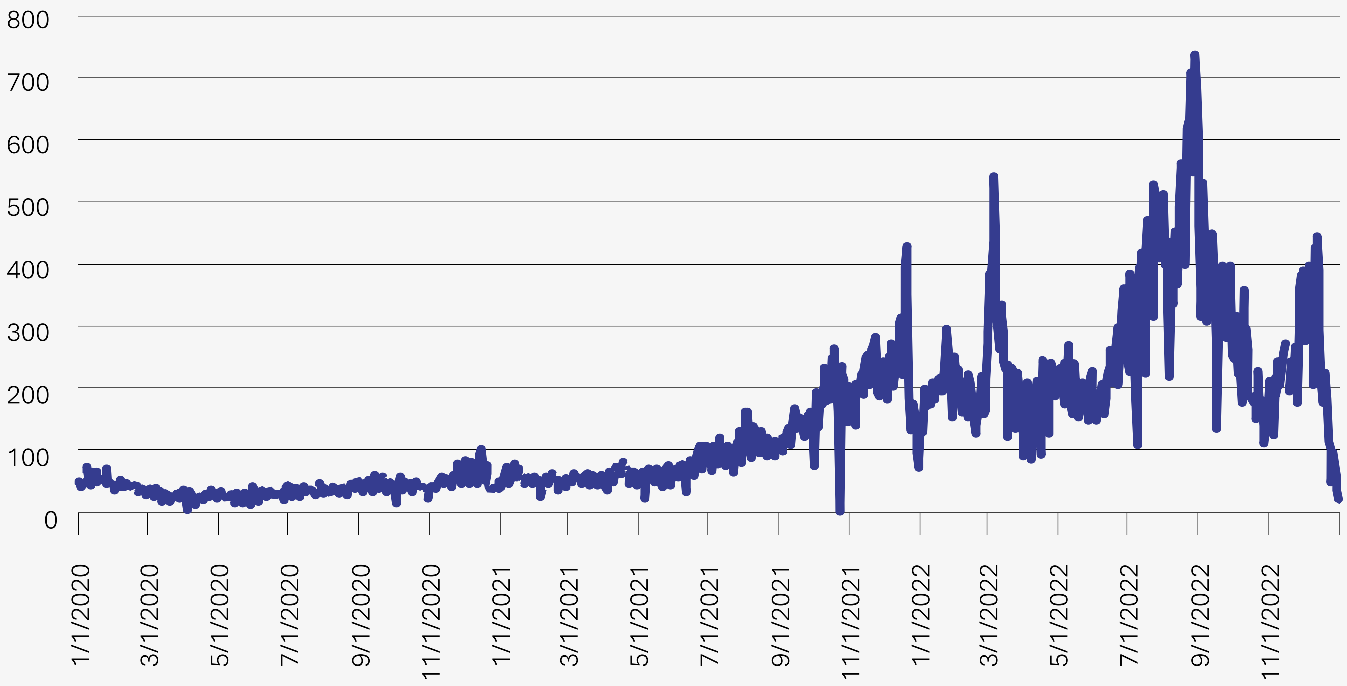


Figure 14. Romanian day-ahead electricity baseload prices on the OPCOM exchange in EUR/MWh
Source: OPCOM.

235 MW
From Romania

Emergency imports from Romania quickly ramped up to 235 MW to replace lost Ukrainian electricity.

EUR 90/MWh
Lifeline

Romania capped electricity prices for Moldova at EUR 90/MWh—three times lower than OPCOM's market rate.

By the middle of the month, however, Moldova's Right Bank consumers suffered a new blow as the Russian-controlled MGRES thermal power plant threatened to reduce supply, claiming the incumbent Moldovagaz was not delivering sufficient gas volumes from Russia to produce enough electricity.

Electricity flows from the Transnistrian producer had historically covered around 70% of the Right Bank's demand and in the months prior to the new energy crisis during the heating season of 2022-2023, they were delivered in line with contracts renewed on a monthly basis.

By the second half of October, the producer owned by Russia's InterRAO state company warned supply would be reduced to around 27%. As the month ended, MGRES suspended all deliveries, making it particularly difficult for Moldova's Right Bank to plug the shortfall.[20]

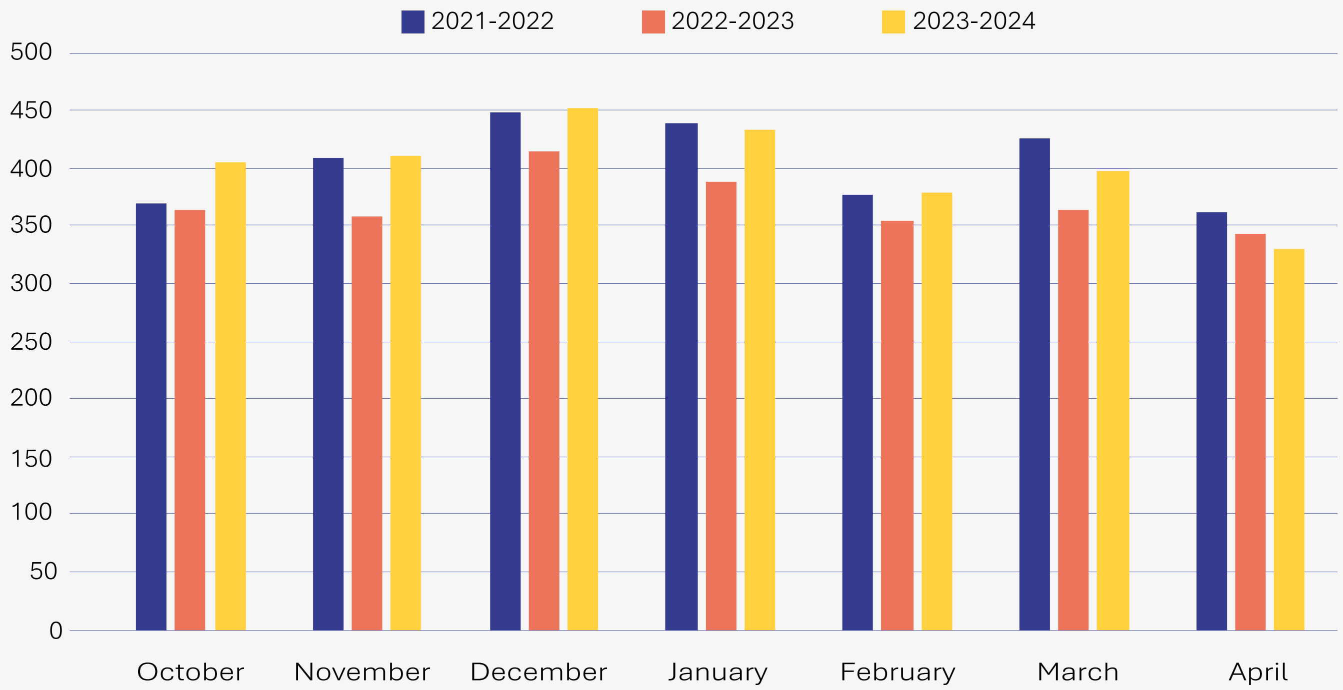


Figure 15. Monthly electricity consumption on the Right Bank in winter months in gigawatt hours
Source: Moldelectrica.

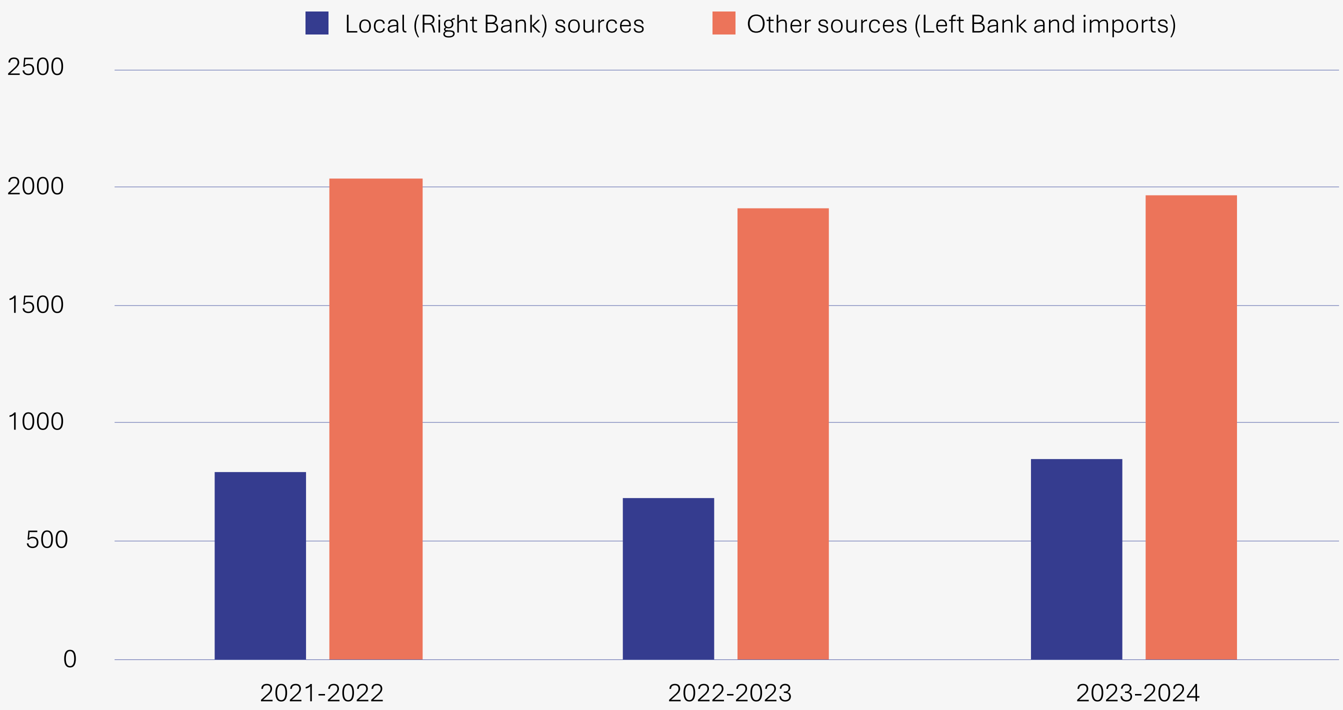


Figure 16. Electricity consumed on the Right Bank of the River Nistru from local and other sources in gigawatt hours
Source: Moldelectrica.

With the electricity supply situation being very critical, Energocom and officials at the Ministry of Infrastructure and Regional Development were rushing to secure imports from Romania.

The state wholesaler signed the first import contract with Romania's Hidroelectrica at prices hovering around EUR 90.00/MWh. Subsequent monthly contracts were signed with Romania's Nuclearelectricia and OMV PETROM.

At the same time, the Romanian state-owned exchange OPCOM fast-tracked Energocom's application to trade on the bourse and by the end of October, the company was already buying from the platform, albeit at market, rather than capped prices.[21]

Secretary of state Constantin Borosan recalled an introductory call with the Romanian energy regulator ANRE where he spoke to the authority's deputy president at the time, Zoltán Nagy-Bege.

He described Nagy-Bege as being amenable and keen to help Energocom secure all licences that were needed to become active on the Romanian power and gas markets within a short period of time, fully understanding the difficult situation that Moldova was in at the time.[22]

Nevertheless, while Moldovan authorities were making significant progress in terms of securing new supply contracts with Romania and registering on the local market, the domestic electricity and gas supply situation was becoming critical.

With limited gas imports entering the country at average levels of only 5.7 mcm/day, the government asked Right Bank thermal producer Termoelectrica to switch to fuel oil to save natural gas.[23] The measure was already anticipated in the winter preparation plan which had been adopted in August.[24]

On 17 October, Energocom initiated its first buy tenders under the EBRD revolving credit facility but the first successful auctions materialised only three days later.[25][26]

Even so, gas imports were insufficient for both banks of the Nistru, which gave Transnistrian authorities a reason to keep supply to Right Bank consumers suspended throughout November.

TRANSNISTRIA SUSPENDS ELECTRICITY FLOWS

On 28 October 2022,

a delegation from Chișinău travelled to Transnistria to discuss electricity and gas deliveries under a diplomatic 1+1 format organised at the headquarters of the Organization for Security and Co-operation (OSCE) in Tiraspol.[27]

During the first round of discussions, the Moldovan delegation explained to Transnistrian counterparts the need to put preparation measures in place, including for demand reduction, similar to those which had already been adopted on the Right Bank of the Nistru.

They also pointed out that Transnistrian demand could be reduced by limiting energy-intensive crypto mining activities[28] and proposed Russian gas imports be fairly distributed to reflect winter demand on the two banks of the River Nistru.

Under the proposal the Left Bank would receive 2.6 mcm/day, while the Right Bank would keep 3.1 mcm/day.[29]

Borosan said the Transnistrian authorities strenuously denied the existence of crypto mining activities and refused to reach a compromise with the delegation from Chișinău, claiming the pledged gas volumes were insufficient to allow them to generate enough electricity to cover demand on both banks of the River Nistru.[30]

The secretary of state left with the impression that Transnistrian authorities were in fact driving Moscow's agenda, expecting that once Russia wiped out Ukraine's energy infrastructure it would gain control over Moldova's.[31]

November became exceptionally difficult for Moldovan consumers as winter demand was rising and MGRES deliveries remained suspended.

The situation was further compounded by an increase in Russian attacks on Ukrainian infrastructure, which led to the decoupling of the Moldovan and Ukrainian systems and triggered two major blackouts on 15 and 23 November.[32]

Electricity supplies to the capital Chișinău were cut for four hours on those days, while smaller settlements saw even longer power cuts.[33]

Nikolaos Tourlis, who has been working for USAID's Moldova Energy Security Activity (MESA) project, recalled how Moldovans were downloading Ukrainian apps on their smartphones, showing which parts of the Ukrainian electricity systems were struck so they could guess which areas of the interconnection with Moldova would be impacted.[34]

Borosan recounted how Andrei Spînu, then minister of infrastructure and regional development, initiated a series of meetings with diplomats active in Moldova as well as regional mayors to update them on developments related to electricity and natural gas supplies as well as ask local officials to reduce consumption as much as possible.[35]

Throughout that period Moldova secured its electricity from internal production on the Right Bank as well as imports from Romania but officials were aware of the fact that deliveries were made at premium prices, putting a heavy burden on end-consumers and the economy as a whole.

However, the process was exceptionally difficult because Energocom was struggling with cashflow issues caused by high energy costs and needed to borrow money from banks. It turned out that banks themselves were restricted by the National Bank of Moldova with respect to issuing large credit lines because they themselves also had cashflow issues.

As a result, Energocom turned to other state-owned companies such as Chișinău Airport, the National Lottery of Moldova and Chișinău Glass Factory to borrow EUR 9 million, which it returned at the end of 2022. The loans were made possible by the fact that those companies were also owned by the Public Property Agency, Energocom's sole shareholder.[36]

Meanwhile, the risk of social unrest caused by rising energy costs and whipped up by pro-Russian opposition leaders such as Ilan Șor was also very high.

That meant that authorities in Chișinău had to consider initiating another round of talks with officials in Transnistria to negotiate the resumption of cheaper electricity

S.A. Energocom and S.N. Nuclearelectrica S.A. signed a Memorandum of Understanding, outlining future collaboration, in light of the planned commercial operation of units 3 and 4 at Cernavodă, Romania, scheduled for 2030. The event was attended by Romanian and Moldovan energy ministers, Sebastian Burduja and Victor Parlicov as well as Energocom and Nuclearelectrica representatives on July 20, 2023.

supply from the MGRES thermal power plant.

Just as November was drawing to a close, a second round of talks was initiated under the 1+1 format, during which authorities in the Moldovan capital sought to explain that the Right Bank and Left Bank of the River Nistru were interdependent.

Transnistria needed the Russian gas supplied via Moldova as well as the revenue made from selling electricity to Moldova, which makes up the bulk of the region's annual income.[37]

On the other hand, Moldova itself needed the electricity generated from the Russian gas at the MGRES plant, which is significantly cheaper than electricity produced in Moldova or imported regionally.[38]

Ion Andronic, head of the electricity department at the Ministry of Energy, said the actions and events of November 2022 could be seen as a stress test for the energy system of the Republic of Moldova.

The government had to handle a crisis on multiple levels, ranging from total supply cuts from MGRES and Ukraine, soaring electricity prices across Europe and imports via a single transmission line from Romania through to the systematic destruction of the Ukrainian transmission system by Russian attacks designed to jeopardise the region's security.

Importantly, however, the country had adopted EU-aligned electricity market rules, which helped Moldova to buy electricity from EU Member States. As a result, several supply contracts had been concluded with Romanian producers including Hidroelectrica, JSC, "Nuclearelectrica" JSC, Complexul Energetic Oltenia, Complexul Energetic Craiova and OMV Petrom JSC.[39]

ENERGOCOM TAPS SOUTHERN GAS CORRIDOR IMPORTS

As Moldovan authorities were looking to renew supply from MGRES, Energocom was working to secure gas deliveries from other sources, including from southern Europe, where it was already licensed to trade and ship gas via the Trans-Adriatic Pipeline (TAP) and Interconnector Greece Bulgaria (IGB) or use the Bulgarian transmission network.[40]

On the day when Moldovan officials were supposed to hold a new round of talks with MGRES representatives, Energocom achieved a milestone by importing natural gas from the Southern Gas Corridor.[41]

Earlier in November, Energocom made two large purchases from an undisclosed buyer, with physical deliveries via Interconnector Greece Bulgaria and reversed along the Trans-Balkan pipeline, crossing Bulgaria, Romania and Ukraine before reaching Moldova.

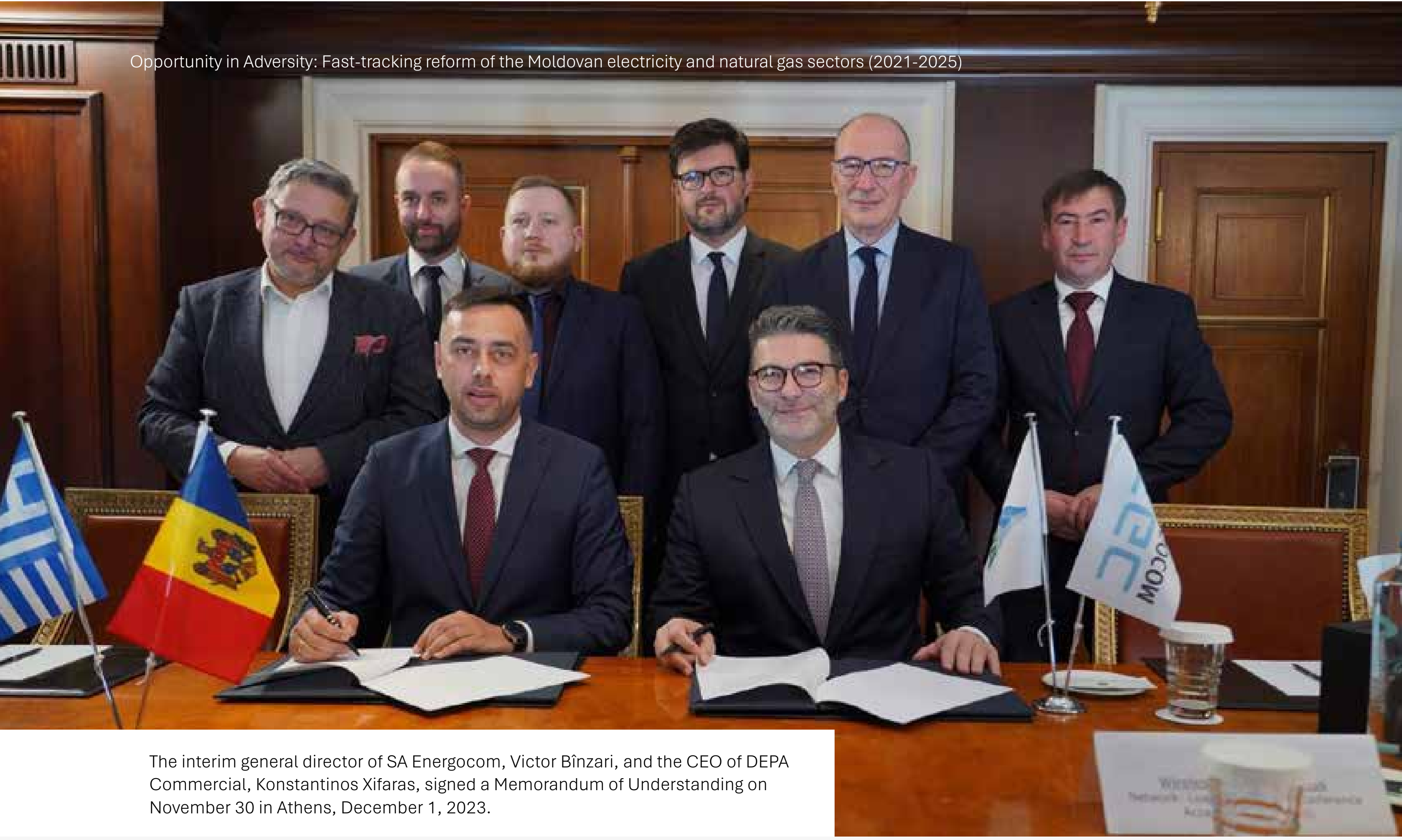
The first purchases recorded on 11 November were for 138 million cubic metres at a spot price of EUR 85.00/MWh, while the second deal concluded on 15 November was for 10 mcm at a price of EUR 75.79/MWh,[42] which was fairly in line with hub prices at the time.

Constantin Borosan recalled how, during talks, MGRES employees were receiving calls from third sources to inform them that the Right Bank had started physical imports from the south but volumes were not delivered as part of Gazprom's long-term contract with Moldovagaz.[43]

As Energocom was now in a position to import alternative sources of supply, the limited Russian deliveries could be transferred to Transnistria to ensure the resumption of cheaper electricity production for the Right Bank of the River Nistru.

Authorities decided the full 5.7 mcm/day Russian flows would be diverted to Transnistria, while the Right Bank would cover demand from alternative sources, which meant that by 3 December 2022 MGRES resumed electricity deliveries to Moldovan consumers.

The deal received international criticism but was supported by the Energy Community, which said it would allow consumers to access electricity at affordable prices.[44]



The interim general director of SA Energocom, Victor Bînzari, and the CEO of DEPA Commercial, Konstantinos Xifaras, signed a Memorandum of Understanding on November 30 in Athens, December 1, 2023.

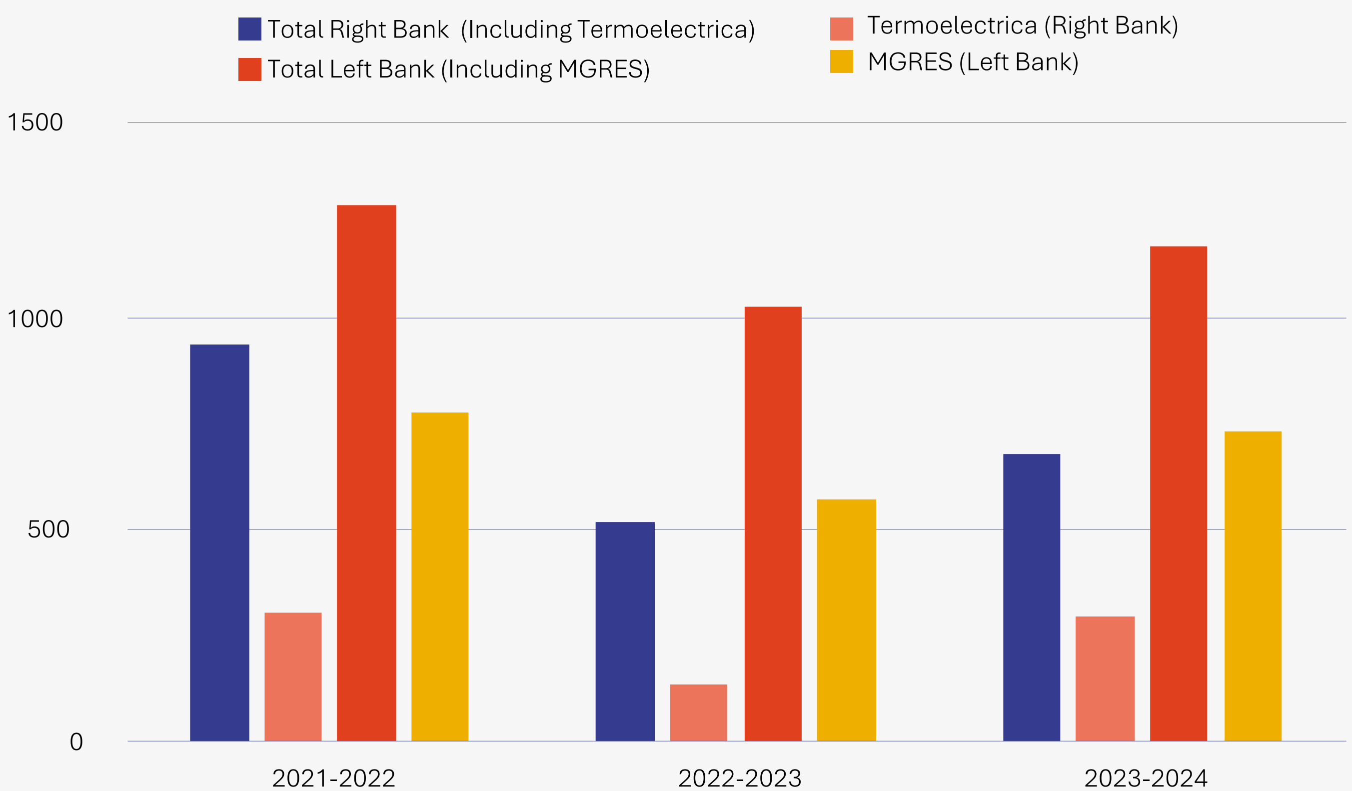


Figure 17. Natural gas delivered by Moldovagaz to both banks of the River Nistru over the October-April period. Data in million cubic metres

Source: Moldovagaz.

EUR 85/MWh Breakthrough

On 11 November 2022, Energocom secured its first Southern Gas Corridor import at EUR 85/MWh via IGB and TAP.

5.7 mcm/day Reassigned

All Russian gas was redirected to Transnistria to restart MGRES electricity supply for Moldova's Right Bank.

USD 61.4M Saved

Switching to hub-based gas imports allowed Moldova to save over USD 61 million by early December 2022.

67 Gas Tenders Launched

Between May 2022 and January 2023, Energocom carried out 67 procurement tenders, 55 under EBRD support.

1 Market, 2 Prices

As gas costs dropped, a split market emerged—regulated tariffs rose while free-market offers attracted larger consumers.

The move proved auspicious not only because Moldova could buy cheaper electricity but also because by diverting Russian gas supply to Transnistria, the Right Bank actually managed to save USD 61.4 million. The price of gas paid by Moldovagaz for volumes bought from Energocom and secured on hubs was now falling below Gazprom's contractual levels.[45]

Unclassified data published by Energocom in 2023 show that the state wholesaler had carried out 67 buy tenders over the period 23 May 2022 to 19 January 2023, of which 55 were carried out under the EBRD umbrella, while the remaining 12 were initiated as CSE orders.[46]

As the year was coming to an end, Moldova's electricity and natural gas supplies were rebalanced and fuel costs were beginning to fall, making it more profitable to purchase natural gas from hubs and incentivising smaller Moldovan traders to enter the market. That meant that volumes purchased on free markets were more attractively priced than the natural gas delivered to end-consumers as part of the public service obligation which had been introduced earlier in 2022.

Medium and larger consumers, which were entitled to switch suppliers, decided to do so, leaving households to pay the more expensive tariffs that reflected the higher purchase costs incurred earlier in the year. As a result, CSE decided to introduce a mechanism whereby consumers looking to switch suppliers were expected to pay a fee that reflected the difference between regulated supply prices and falling spot levels.[47]

The measure, which was kept in place throughout 2023, proved highly unpopular among Moldova's smaller suppliers, who were concerned the country was no longer abiding by pledges to allow the emergence of a free gas market.

Although Moldova successfully overcame another major energy crisis in winter 2022-2023, the soaring costs of electricity and natural gas became a politically fraught issue, which remained a major pain point in 2023 and 2024 and continued to preoccupy consumers as the country was preparing for presidential and parliamentary elections in 2024 and 2025.

However, while challenges remained, Moldova was also getting ready for a number of milestones in 2023, when an independent audit into its historical debt for Russian gas supply was expected to be published and the overdue unbundling and certification of its electricity and gas transmission system operators had to be finalised.

Consult this chapter endnotes at page 208.

CHAPTER 7

Overdue reform

Winter 2022/2023

brought another energy crisis in Moldova as Gazprom supplied limited volumes of gas and the Russian-controlled MGRES power plant in Transnistria suspended electricity flows throughout November.

Even so, Moldova found opportunity in adversity, achieving several milestones that would have been unthinkable even a year before.

56%
Supply Gap

With Gazprom delivering only 5.7 mcm/day—56% below peak demand—Moldova shifted to full independence from Russian gas on the Right Bank by end-2022.

100%
Diversification

By the end of 2022, Moldova fully covered the Right Bank's gas and electricity needs through regional spot markets and Romanian imports, ending reliance on Russian flows.

1st
Certification Step

In late 2022, Moldova notified the EU of its intent to certify Moldelectrica, marking a delayed but crucial milestone in aligning with EU energy rules.

With Russian imports limited to a flat profile of 5.7 million cubic metres per day, as low as 56% compared to Moldova's peak demand calculated for the month of December, the state wholesaler Energocom began to buy spot volumes on neighbouring markets.

That meant that by the end of 2022, the Right Bank went from full reliance on Russian imports to becoming entirely independent, being in a position to divert all Russian flows contracted by the incumbent Moldovagaz to Transnistria, which needed the fuel to produce electricity for both banks of the River Nistru.

It also secured monthly supply contracts with Romanian producers, which helped to plug the shortfall caused by the curtailment of deliveries from the Russian-controlled Transnistrian gas-fired power plant.

The ability to make alternative arrangements at short notice boosted Moldovan officials' confidence in their capacity to withstand Russia's political pressure and prepare for several challenges whose resolution was long overdue.

Those primarily included the unbundling and certification of its electricity and natural gas grid operators, which are discussed in depth in this chapter.

As 2022 was coming to an end, the Moldovan regulator ANRE notified[1] the Energy Community Secretariat of its preliminary decision to certify the electricity transmission system operator Moldelectrica, concluding it was compliant with the requirements of the Independent System Operator outlined in Articles 13 and 14 of the EU's Electricity Directive 2009/72/EC.[2]

It was an important step, albeit one that should have been completed several years earlier.

MOLDELECTRICA'S CERTIFICATION

As an Energy Community Contracting Party since 2010, Moldova had committed itself to transposing and implementing all EU electricity and gas market regulations, including the Electricity and Gas Directives passed in 2009, collectively known as the Third Energy Package.

Under those regulations, EU Member States and Energy Community Contracting Parties are required to unbundle transmission operations from other activities related to production, supply or distribution included in vertically integrated undertakings and establish independent transmission system operators.

The final certification as an independent system operator in countries that are Contracting Parties of the Energy Community is granted by the respective national energy regulator based on the opinion of the Energy Community Secretariat as the international organisation tasked with extending the EU's internal market to neighbouring non-member countries.

In Moldova's case, the electricity transmission system had historically been part of a large production and transmission entity, Combinatul Energetic Moldovenesc, which was restructured on several occasions after its establishment in the 1950s. [3][4]

After independence, the Moldovan government set up key state enterprises namely Moldelectrica, Nodul Hidroenergetic Costeşti and Autoelectrotrans.[5]

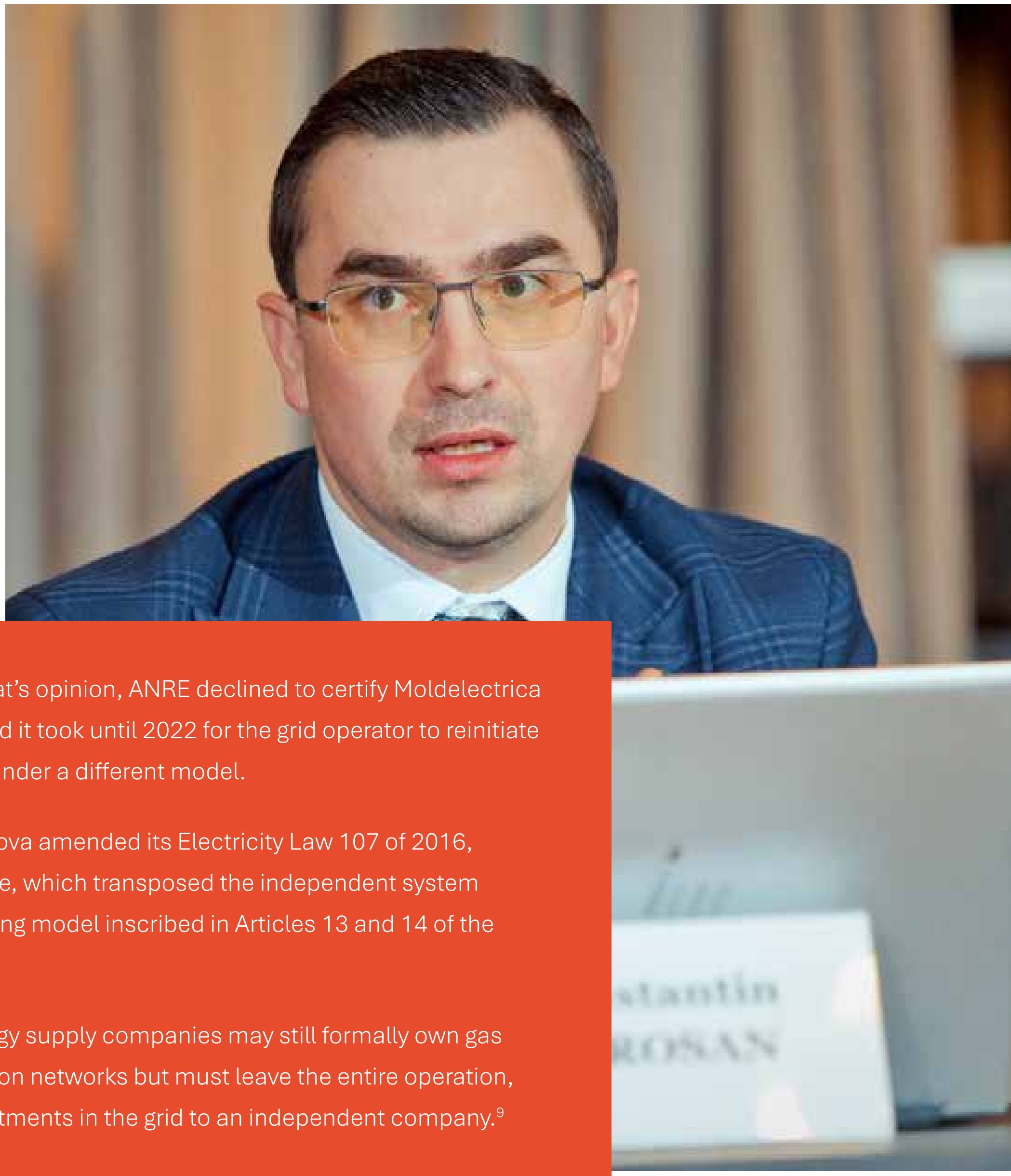
Eight years after Moldova became a Contracting Party of the Energy Community, Moldelectrica submitted a request for certification as an electricity transmission system operator to the regulator ANRE under the ownership unbundling (OU) model, which was the only model envisaged by Moldovan law at the time.

Under the OU model, integrated companies sell off their networks and no production company is allowed to hold a majority share or interfere in the work of transmission system operators.[6]

At the beginning of June 2019, ANRE issued a preliminary decision on the certification and notified the Energy Community Secretariat on 11 June 2019, which, however, concluded that the certification could not be granted because the conditions on separation of control and ownership over transmission had not been fulfilled.

The Energy Community Secretariat pointed out that Moldelectrica did not own the transmission assets, which was one of the conditions for certification under the OU model.

Additionally, Moldelectrica and the Public Property Agency (APP), which exercised direct control over the state companies involved in generation and supply activities for electricity and natural gas, were subordinated to the same public body, the Ministry of Economy at the time.[7]



Constantin Borosan, currently secretary of state in the ministry of energy.

Following the Secretariat's opinion, ANRE declined to certify Moldelectrica under the OU model and it took until 2022 for the grid operator to reinitiate the unbundling, albeit under a different model.

In February 2022, Moldova amended its Electricity Law 107 of 2016, introducing a new article, which transposed the independent system operator (ISO) unbundling model inscribed in Articles 13 and 14 of the Electricity Directive.[8]

Under that model, energy supply companies may still formally own gas or electricity transmission networks but must leave the entire operation, maintenance and investments in the grid to an independent company.[9]

The legislative amendment of February 2022 allowed Moldelectrica to submit a request for certification under the ISO model to ANRE in September 2022.

Two months later, the regulator issued a preliminary decision and subsequently notified the Energy Community Secretariat of its conclusion that Moldelectrica complied with the requirements outlined under the ISO model of unbundling.

Importantly, as the Secretariat was reviewing ANRE's certification notification in early 2023, Moldovan officials established a dedicated Ministry of Energy, which was spun off from the Ministry of Infrastructure and Regional Development, a decision which Constantin Borosan described as long-overdue and much-needed for Moldova.[10]

The decision was taken to introduce a critical exemption to the State Enterprise Law, which stipulated that the Agency for Public Property (APP) exercised ownership over state assets, including transmission, on behalf of the government.

Meanwhile, the Ministry of Energy issued an order whereby it confirmed its rights to exercise ownership over transmission assets under the administration of Moldelectrica.[11]

Although the introduction of the ISO unbundling model to Moldovan legislation brought Moldelectrica closer to certification, there were still two issues that gave rise to concern, as pointed out by Dirk Buschle, former deputy director of the Energy Community.[12]

Firstly, although the ISO unbundling model allowed for the separation of transmission operations from other activities such as production or supply, those remained firmly within the state framework and there was a stringent need to ensure clear boundaries between them, he said.

Secondly, as is typical of former Soviet communist countries such as Moldova or Ukraine, with the latter being the first Energy Community Contracting Party to carry out the unbundling of gas and electricity transmission assets, ownership of transmission assets did not lie with the operator. That arrangement was a throwback to communist days, when state companies merely operated transmission assets on behalf of the public.[13]

In a written note, Smaranda Miron, senior dispute and energy lawyer at the Energy Community, further explained that the goal of unbundling, including of the ISO model, was to eliminate possible conflicts of interest between transmission and other activities included in vertically integrated undertakings.[14]

She pointed out that based on the Energy Community Secretariat's experiences of the unbundling of the Ukrainian electricity transmission system operator Ukrenergo, where different bodies within the government exercise the roles of shareholder and owner of the assets as well as control over energy generation and supply companies, it would be the government itself which is to be considered the vertically integrated undertaking.

In Moldova, energy activities have also been performed by undertakings with whole or majority ownership by the state, which meant that a true separation of control had to be implemented to prevent possible conflicts of interest.[15]

More specifically to Moldelectrica's case, there were concerns over possible conflicts of interest linked to relations between the operator, the Ministry of Energy, which has control over it and represents the state as the full owner

Certification Achieved

In July 2023, Moldova's ANRE granted final ISO certification to Moldelectrica, confirming that safeguards to ensure operational independence from state influence were in place.

From OU to ISO

After a failed attempt in 2019 under the Ownership Unbundling model, Moldova amended its law in 2022 to adopt the Independent System Operator model, unlocking progress on energy reform.

Ensuring Independence

The Energy Community Secretariat emphasized the need to separate control between transmission operators and energy producers/suppliers, highlighting risks of conflicts of interest due to overlapping government roles and board memberships.

of the transmission assets, and APP as the agency in charge of operating state property. As Moldelectrica's founder, APP is also able to appoint its boards of directors and administrators.

Given the complex structure of state ownership and control over energy assets and activities, legal experts from the Energy Community Secretariat raised several problems.

Firstly, the Secretariat was concerned that representatives of the ministry could be appointed by APP to boards of public generation companies such as Termoelectrica and CET Nord or suppliers such as Energocom and Moldovagaz.

Article 9(3) of the EU's Electricity Directive stipulates that the independence requirements apply across the gas and electricity markets, thereby prohibiting joint influence over a natural gas producer and an electricity transmission system operator, for example.[16]

Secondly, the Secretariat pointed out that of the seven members of Moldoelectrica's board of directors, a collegial administrative body, two were employees of the Ministry of Energy, while the other five were representatives of the Ministry of Infrastructure and Regional Development, the Ministry of Economy and the Ministry of Finance.

The Secretariat said there was a material risk that some of the appointees who may also sit on the boards of supply or generation companies could use their access to confidential information from Moldelectrica to the advantage of those supply or generation companies.

Thirdly, the Secretariat also noted the need to ensure the independence of the Ministry of Energy from interference from the government. It pointed out there was a risk of indirect interference in the work of Moldelectrica, arising from the relationship of subordination of the Ministry of Energy as the sole shareholder of the operator to the government.

Fourthly, the Secretariat was concerned that the Ministry of Energy not only exercised control over Moldelectrica but was also involved in policymaking and implementation of rules in the energy sector. The possibility for conflict of interest was exacerbated by the highly concentrated power market structure in Moldova and the high level of public ownership.

The Secretariat observed that only a few months prior to establishment of the Ministry of Energy, its predecessor, the Ministry of Infrastructure and Regional Development, had been involved in price negotiations for electricity supply from the MGRES power plant in Transnistria or from Romanian producers.

Nevertheless, in its opinion, the Energy Community acknowledged that the Ministry Order 2 issued in 2023 acknowledged the possibility of conflict of interest in a few instances and sought to put a number of safeguards in place.

For instance, the order prohibits the ministry's management and staff from intervening in the operation of Moldelectrica, from influencing it in any way with regard to granting third party access and investment planning and from disseminating information that would give certain market participants anti-competitive advantages.

The Secretariat pointed out that the regulations referred only to the ministry staff and did not include the minister himself.

Furthermore, under Order 2/2023, the ministry appoints a state secretary to carry out all tasks related to the management of the shares in Moldelectrica, as well as management of the state property operated by Moldelectrica, independently from the minister and other state secretaries in the ministry.

The Energy Community welcomed the designation but said the regulations that had been put in place were not sufficient, noting that in Ukrenergo's case, the designation of a deputy minister exclusively in charge of the TSO was done by decision of the government and not just by ministerial order. That, in turn, guaranteed the commitment of the government not to interfere and exert indirect control over the TSO and the deputy minister's independence from the Ministry of Energy.

The Secretariat said Moldelectrica had introduced a compliance programme for the company's employees in 2022 and had engaged a compliance officer to ensure the company was upholding requests for third party access in a non-discriminatory manner. However, that compliance programme did not apply to ministry employees.

Based on those concerns, the Secretariat said the certification of Moldelectrica in line with the ISO model depended on putting several safeguards in place in relation to independence of the operator.

The Secretariat requested clear separation of the public bodies controlling the transmission operator on the one hand and the production/supply companies on the other hand.

It also insisted on guaranteeing the autonomy of the Ministry of Energy in relation to the government as well as the independence of Moldelectrica from interference from the ministry and its staff, considering that the ministry is also a policymaking body.

In that context, it requested ANRE make the certification conditional upon Moldelectrica's statute being supplemented by a provision explicitly preventing the ministry from interfering in the company's operational and commercial activities.

It also wanted the secretary of state to be appointed by the ministry to carry out all tasks related to management of the shares and the actual property operated by Moldelectrica to be excluded from participating in energy policymaking or its implementation.

It insisted on the government and the prime minister being prohibited by governmental act from interfering in the ministry's control over Moldelectrica.

Representatives of the Ministry of Energy on the board of directors of Moldelectrica would be excluded from holding positions in other electricity or gas generation and supply companies after the expiry of their mandates.

Importantly, the Secretariat insisted on the introduction of selection procedures whereby, upon expiry of the board members' mandates, a majority of independent members would be selected from outside the public administration and enterprises.

The Secretariat further requested that ANRE, in its final decision, make the certification conditional upon the Ministry of Energy finalising a compliance programme agreed with the Secretariat to avoid the risk of ministerial interference in Moldelectrica.

In a statement of July 2023, Moldelectrica confirmed ANRE approved the final certification based on the opinions and requests issued by the Energy Community Secretariat, noting that the safeguards required to ensure a clear separation of activities had been put in place.

It also said the safeguards which had been adopted would not allow third parties to exert direct or indirect influence on the transmission system operator.[17]

In a written note,

Ion Andronic, the Ministry of Energy's head of electricity department, said the transmission system operator Moldelectrica had been certified by the regulator ANRE on 11 July 2023 as an independent system operator.

To fully address the Energy Community Secretariat's concerns related to the potential conflict of interest, numerous activities were undertaken including the adoption of a compliance programme and the appointment of a compliance officer. Following the certification of Moldelectrica by ANRE, the Secretariat closed its related case.

He said that on 12 April 2024 all the pending conditions had been fulfilled.

To exclude the company's founder from any activity related to the establishment or implementation of energy policy, amendments were made to Government Decision 118/2023 on the organisation and functioning of the Ministry of Energy.

Several orders of the ministry were approved, modifying the statute of the enterprise and the regulation of the board of administration, as well as the regulation on the selection and appointment of the members of the board of administration of Moldelectrica from outside the public administration.[18]

Reflecting on Moldelectrica's unbundling process, Buschle said that while the preferred option would have been to outsource transmission operations to a completely independent operator and for state institutions to retain ownership of the assets, in Moldova the divestment process had to be mindful of the country's complex historic arrangements.

He said the Energy Community Secretariat had to provide creative solutions while ensuring they were robust.

He also clarified that the arrangements that had been put in place refer strictly to the Right Bank of the Nistru and do not include the Transnistrian side.

A significant contribution was also made by the Moldovan regulator, which Buschle praised for being competent and keenly involved in all discussions regarding the unbundling of Moldelectrica.

To Buschle's mind, there is no doubt that the unbundling of Moldelectrica brought a clear boost to management, persuading them not to act politically but as proper managers, working in the interest of companies.

He said the unbundling, along with Moldova's synchronisation with the continental European system, was a critical step towards preparing the country on its path towards market coupling with EU markets.

Moldelectrica was now tasked not only with core operational responsibilities, but also had to prepare market creation and greater cross-border cooperation with neighbouring countries and the strategy towards market coupling in common with the electricity market operator LLC "Operatorul Pieței de Energie M".[19]

DIVESTING GAS TRANSMISSION OPERATIONS

If the unbundling of Moldelectrica proved a complex task, the divestment of gas transmission operations turned out to be even more challenging on multiple fronts.

After Moldova joined the Energy Community as a Contracting Party, it received a derogation from a requirement to unbundle its gas transmission operations until 1 January 2020, as it was generally accepted that separating transmission operations and establishing an independent operator would be a politically complex process.[20]

The operator of the transmission network, Moldovatransgaz, was indirectly owned by Gazprom, which holds a majority share in the mother company Moldovagaz. Over the years, the Russian producer repeatedly refused to cooperate with Moldovan authorities and the Energy Community, rejecting the unbundling of transmission operations.

Although the January 2020 deadline was not met, a set of measures for the unbundling of Moldovatransgaz was nonetheless developed by the company itself and was due to be submitted to the regulator by October 2020.

However, the deadline had to be extended to give Moldovatransgaz time to submit a certification request under the independent transmission system operator (ITO) model.[21]

Based on the unbundling regulations outlined in the EU's Third Energy Package, energy supply companies may still own and operate gas or electricity networks but must do so through a subsidiary and important decisions need to be taken independently of the parent company.[22]

At the end of August 2021, ANRE informed Moldovatransgaz that the certification had been declined after concluding that a number of measures that were necessary for compliance with the ITO model had not been implemented.[23]

Two months later, when Moldova experienced its first gas crisis, Artur Lorkowski and Dirk Buschle travelled to Chișinău. Following a meeting they had with the then minister of infrastructure and regional development, Andrei Spînu, the decision was taken to initiate infringement proceedings against Moldova for failing to comply with its obligations under the Energy Community Treaty.

An Opening Letter was sent in January 2022, followed by a Reasoned Opinion published two months later, in which the Energy Community Secretariat concluded that Moldovatransgaz could not be certified under any of the unbundling models outlined by the EU's Gas Directive 2009/73/EC.[24]

Buschle recalled that even before the January 2020 deadline had expired, the Energy Community sought to propose the unbundling to Gazprom via intermediary discussion with Moldovagaz's management but the suggestions were always turned down.

In hindsight,

Gazprom's repeated refusal to cooperate with Moldovan authorities to divest the country's transmission operations may have been short-sighted, since the Russian producer could have been in the position to shape the process by rearranging Moldovagaz's corporate governance and amending its statutes, he said.

Predrag Grujičić, head of gas unit, Energy Community Secretariat

On a subsequent visit to Chişinău in December 2021, the Energy Community's Dirk Buschle and Predrag Grujičić discussed with Andrei Spînu the possibility of amending the gas law to include the provision that the unbundling could be triggered *ex officio* by the regulator ANRE in case no certification request were made by an uncertified gas transmission system operator.[25]

Energy Community director Artur Lorkowski said the idea was inspired by the model already pursued in Poland in 2010 after the regulator URE intervened to force transfer of the operation of the Polish section of the Yamal pipeline from EuRoPol Gaz to the Polish gas grid operator GAZ-SYSTEM.

The Yamal pipeline was designed to ship 30 billion cubic metres of gas annually from Russia to Germany via Belarus and Poland, with the Polish stretch being operated by

3-Year
Delay in Unbundling

Despite the initial 2020 deadline, Moldovatransgaz failed to comply, resulting in regulatory extensions and delays.

1
Regulator with Ex Officio Powers

In 2022, ANRE gained authority to initiate unbundling and certification independently of the operator's request, overcoming previous deadlocks.

Jun 16, 2023
Key Date

ANRE officially triggered the certification process against Moldovatransgaz due to non-compliance.

Sep 19, 2023
Operational Transfer

Vestmoldtransgaz (VMTG) took over operational control of the gas transmission system, ensuring smooth, uninterrupted operations.

EuRoPolGaz, a company owned 48% by Poland's state company PGNiG, 48% by Gazprom and 4% by the privately held Polish company Gas Trading.

Poland and Russia had almost completed negotiations on the renewal of a supply contract earlier in 2010, when the European Commission intervened, demanding the application of EU rules on transparency and third-party access to the Polish section of the Yamal–Europe pipeline.

Russia opposed the requirements, which meant that the regulator, which was not part of the negotiations, was empowered to trigger the transfer of transmission operations from EuRoPol Gaz to GAZ-SYSTEM, which was later certified as an independent system operator.[26] Following Russia's full-scale invasion of Ukraine and the energy crisis it provoked, Poland decided to seize the 48% stake held by Gazprom in EuRoPol Gaz.[27]

Lorkowski, who was heavily involved in discussions related to the transfer of transmission operations from EuRoPol Gaz to GAZ-SYSTEM in 2010, said similar steps were also taken in Moldova, as changes to the gas law empowered the regulator ANRE to withdraw the licence for transmission operations *ex officio* if requirements related to unbundling were not met.[28]

On 29 July 2022, Moldova adopted Law 249/2022, which introduced a series of amendments to Gas Law 108/2016, enabling ANRE to initiate unbundling and certification of the gas transmission system operators under the ISO model in case no certification request were submitted by an uncertified TSO within nine months of enforcement of Law 249/2022.

In concrete terms, at the request of the Energy Community Secretariat, the watchdog could designate an independent system operator and initiate the certification procedure. If the uncertified TSO failed to fulfil the unbundling and certification requirement three months after the certification procedure had been triggered, the licence of the uncertified TSO would be withdrawn and ANRE would provisionally designate a new TSO.[29]

The deadline for the certification request was set for 10 June 2023. Since Moldovatransgaz did not initiate the procedure, ANRE triggered it on 16 June 2023, giving the company three months to select an unbundling model and comply with all related requirements.

On 7 July 2023, ANRE issued Decision 434/2023, provisionally designating Vestmoldtransgaz (VMTG) as the gas TSO of Moldova starting from 19 September 2023. Under that arrangement stipulated in the ANRE decision, VMTG would become the successor of rights and obligations of Moldovatransgaz regarding contracts with system users and interoperability agreements.[30]

Meanwhile, Moldovatransgaz was requested not to obstruct the transfer and to provide access to the transmission network as well as to relevant information related to transmission and dispatching.

Both companies were asked to take all measures to ensure the reliable operation of the gas transmission network, carrying out technical, legal and commercial evaluations of the gas transmission infrastructure and activities.

It was also stipulated that the two companies would enter a lease agreement valid for at least five years, which would be concluded at least 10 working days before the expiry of the certification term provided for in the Gas Law.

Another requirement stipulated that the two companies would have to determine the qualified staff needed to perform the functions and obligations of a gas TSO and submit proposals to ANRE within one month regarding completion of the list of services and works that can be outsourced by VMTG.[31]

7 April 2022. Parliamentary meeting for the first reading related to amendments to the gas market law. The amendments introduced critical provisions such as security stocks, legal changes preparing the unbundling of the gas grid operator in line with EU rules. In the picture, Nicolae Olari, direction energy policies in the Ministry of Infrastructure and Regional Development, Veronica Muruziuc, legal energy expert, Constantin Borosan, secretary of state in the Ministry of Infrastructure and Regional Development.

In line with ANRE Decision 434/2023, Moldovatransgaz submitted the requested lease contract with Vestmoldtransgaz on 4 September 2023, which became effective 15 days later.

Since Moldovatransgaz itself failed to submit a request for certification as a transmission system operator, ANRE withdrew its transmission licence, provisionally designating VMTG as the new gas grid operator.

Two additional contracts between the two companies were signed, namely a maintenance agreement and a technical operation agreement.

Under the maintenance agreement, concluded until 31 December 2024, Moldovatransgaz committed to guarantee the proper technical and industrial safety of the gas transmission network and VMTG pledged to pay its counterparty for the services provided.

According to the technical operation agreement, which was valid until 24 December 2024, VMTG agreed to take over commercial operation on Moldova's Ukrainian interconnection points Ananiiv, Grebenyky and Lymanskoe and to implement the provisions of the interconnection agreement with the Ukrainian gas grid operator GTSOU. On the other hand, Moldovatransgaz committed itself to shipping the gas from the interconnection points Ananiiv, Grebenyky and Lymanskoe up to the interconnection points managed by Tiraspoltransgaz.

On 19 September 2023, a day after the lease and the two agreements were concluded, VMTG started operating the Moldovan gas transmission system without any technical glitches reported in the process.[32]

Nevertheless, although the operational handover went smoothly, there were several critical legal issues that became evident after ANRE notified the Energy Community Secretariat on 23 February 2024 of its preliminary decision[33] to grant VMTG its provisional certification under the ISO model.

Those related to the lease of Moldova's entire[34] transportation network concluded between Moldovatransgaz and VMTG, the maintenance contract between the two companies and compliance of Gazprom's controlling share in Moldovagaz with the EU's Gas Directive, to which Moldova was legally bound based on its adherence to the Energy Community Treaty.[35]

It is important to clarify from the outset that, just as in Moldelectrica's case, the unbundling of gas transmission operations relates to the Right Bank of the River Nistru.

The operator on the Left Bank is Tiraspoltransgaz S.R.L., which is a *de jure* subsidiary of Moldovagaz. In April 2022, Moldovatrangaz and Tiraspoltransgaz concluded a lease agreement, whereby the latter transferred to the former the right of use of the gas transmission lines from the interconnection point Grebenyky with Ukraine up to the balance demarcation boundary between the two.[36]

The transfer of transmission operations from Moldovatransgaz to VMTG came as a solution to Moldova's gas unbundling deadlock.

VMTG TAKES OVER

VMTG was established to manage and operate the 1.5 billion cubic metre/year Iași–Ungheni interconnector with Romania and became licensed as a transmission system operator in January 2015 inside the Republic of Moldova.

Three years later, Moldova's Ministry of Energy and Infrastructure, which owned the company's shares and the Agency for Public Property, which owned the transmission assets sold VMTG to Eurotransgaz LLC, a company whose sole shareholder was the Romanian gas grid operator, Transgaz.

In 2021, VMTG was certified under the ownership unbundling model, receiving ANRE's final decision on 3 September 2021.[37]

A few days before the final decision was issued, Eurotransgaz LLC sold a 25% share in VMTG to the European Bank for Reconstruction and Development (EBRD).

To this day, VMTG continues to operate and own the transmission network for the 10.6 km Iași–Ungheni section as well as the connecting 109.2 km extension from Ungheni to Chișinău, together amounting to 7.29% of Moldova's gas transmission network.[38]

When issuing its opinion on the certification of VMTG on 24 June 2024, the Energy Community Secretariat agreed with ANRE's preliminary certification of VMTG under the ISO model, acknowledging that the operator was not involved in any activities related to the production or supply of network energy and that its shareholding structure complied with the unbundling rules.

It also noted that VMTG complied with EU requirements on transparency, third party access to the transmission grid and the collection of tariffs, as well as other operations related to nominations, system balancing, dispatch and management of flows and interoperability and interconnection with adjacent gas grid operators.

Nevertheless, a first issue of concern related to an incongruence between the requirements of the ISO model and the maintenance agreement concluded between VMTG and Moldovatransgaz.

In its opinion,

the Secretariat said that under the chosen ISO model, the independent system operator could not outsource essential tasks of the system operation to the system owner to the extent that "the owner *de facto* exercises core tasks of the system operator".[39]

25% Stake Sold to EBRD

Shortly before final certification in 2021, Eurotransgaz sold a 25% share in VMTG to the European Bank for Reconstruction and Development.

518 Outsourced Technicians vs. 61 Staff

The imbalance between VMTG's in-house employees and Moldovatransgaz's delegated staff raised concerns about effective operational oversight.

When issuing the opinion, the Secretariat noted that VMTG employed 61 people and had plans to employ an additional 40. By contrast, Moldovatransgaz delegated 518 employees to perform maintenance services for VMTG.

In that context, the Secretariat expressed concerns that VMTG could not monitor and control whether the work carried out by Moldovatransgaz was carried out in a proper manner.

Analysing VMTG's financial statements for the year 2022 and an independent auditor's report, the Secretariat agreed with ANRE that VMTG had the necessary financial resources to fulfil core TSO tasks, including maintenance services.[40]

Based on those concerns, the Secretariat demanded ANRE introduce several conditions to its final certification decisions.

Those included providing a guarantee that any maintenance costs that need to be passed on to final consumers are paid in line with competitive and transparent procurement procedures.

It also recommended amendments to the maintenance agreement to ensure that VMTG has the undisputed right to "monitor, control and verify the works performed by Moldovatransgaz, including the right to sanction the Moldovan company in case of faulty performance".

The Secretariat notes that the maintenance agreement is due to expire on 31 December 2024 and has recommended that the new service agreement to be signed subsequently be based on a transparent procurement procedure.

Dirk Buschle pointed out that at the time of signing the lease of transmission assets and the maintenance agreement, VMTG and its mother company Transgaz took the decision not to absorb all the Moldovatransgaz personnel. Instead, they opted for a maintenance agreement, which in fact helped to avoid dismissing staff.[41]

Nevertheless, once the current agreement expires,[42] VMTG was expected to choose to carry out the necessary maintenance work itself or, if it insists on outsourcing services to another company, such work would have to be performed in a transparent and fair manner based on clear procurement regulations.

The service provider would have to be a fully independent entity, either an altogether different outfit or a separate company set up by relevant Moldovatransgaz specialists.[43]

VMTG'S LEASE AGREEMENT

In addition to the maintenance agreement, the Secretariat raised concerns about the actual five-year lease signed between VMTG and Moldovatransgaz.

The Secretariat noted that the two main owners of Moldova's transmission assets[44], control of which was transferred to VMTG, are Moldovagaz and Moldovatransgaz.

Collectively, mother and daughter companies own 78% of the leased Moldovan gas transmission system. The remaining 22% belongs to a number of smaller owners, including the Moldovan government through the Ministry of Infrastructure, local authorities and private economic operators.

More precisely, Moldovagaz owns 60.11% of the transmission network and Moldovatransgaz owns 17.12%.[45]

The Secretariat points out that when the lease agreement was concluded in September 2023, Moldovatransgaz effectively owned only 17,12% of the Moldovan transmission network.

That means that the lease agreement for the remaining 82.88% is a *de facto* sub-lease by Moldovatransgaz for the rest of the network owned by other entities.[46]

During an interview for this study, Predrag Grujičić pointed out that the lease agreement was actually concluded during Moldova's state of emergency,[47] a fact that is comprehensively explained in the Secretariat's opinion of 24 June 2024.

It notes that Moldovatransgaz was obliged by a decision by the Committee for Emergency Situations (CSE) issued on 4 September 2023 to conclude a single lease agreement with VMTG for the whole of Moldova's transmission system, including for assets owned by other entities such as Moldovagaz.[48] Under the provisions of Decision 80 CSE, Moldovatransgaz was considered the sole owner of the transmission network leased out to VMTG. That provision was in place for the duration of the state of emergency.

However, the Secretariat points out that when the state of emergency expired at the end of 2023, the provision related to Moldovatransgaz ceased to be valid.

More precisely, the Secretariat points out that since Decision 80 CSE is no longer in force, it is questionable whether Moldovatransgaz had the capacity to sign the lease agreement for the full network, which is majority-owned by its mother company Moldovagaz.

As background to that, Moldovagaz's transmission assets had been leased to Moldovatransgaz on 30 September 1999, which enabled the latter to use the transmission network owned by the mother company for its activities as the country's gas grid operator.

Under Section 3.3 of the 1999 lease, Moldovatransgaz could not "sell, donate, exchange, pledge, lend, write off, dissemble, lease or otherwise dispose of the property subject to the agreement without the consent of Moldovagaz".[49]

That section was modified on 4 September 2023 to allow Moldovatransgaz to enter the lease with VMTG and executed by the president of the management of Moldovagaz's board.

Nevertheless, as the Secretariat points out, under Moldovagaz's internal regulations, decisions that related to more than 25% of the entirety of the company's assets should have been taken by all shareholders of Moldovagaz, including the majority shareholder, Russia's Gazprom.

However, that did not happen and the Secretariat notes that should ANRE find the amendment to the 1999 lease to be void, a new agreement would have to be concluded to ensure Moldovatrangsaz has the full consent of Moldovagaz for a new lease agreement with VMTG.

The Secretariat concludes in relation to the Moldovatransgaz–VMTG lease agreement that, based on the points raised above, the majority of the transmission network owners may not have consented to their property being leased.

In that context, the Secretariat requested that ANRE oblige VMTG to conclude lease agreements with other network owners including the Moldovan government, local authorities and smaller economic operators that also hold a share in the transmission network.

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EU COMPLIANCE

Finally,

the Secretariat also verified compliance of the VMTG lease agreement with the requirements outlined in the EC Gas Directive and found that Article 15 mandates the legal and functional unbundling of the transmission system owner.

In other words, under that legal requirement, the network needs to be owned by a company that is separate from activities related to transmission, distribution and storage, while under the functional unbundling, the transmission system operator needs to be independent with regard to its organisation and decision-making.

Nevertheless, the Secretariat observes that Moldovatransgaz's mother company Moldovagaz is also a supplier of last resort and a universal supplier at regulated prices for all final gas consumers. That means, according to the Secretariat, that Moldovagaz does not comply with the legal unbundling requirement under Article 15 of the Gas Directive since the company is a supplier and owner of the transmission system.

As a result, the Secretariat recommended amendments to Moldovatransgaz's statute to ensure its decision-making is insulated from the main shareholder, Moldovagaz, and that a board of directors is appointed at Moldovatransgaz to ensure an additional layer of separation.

The Secretariat noted that should the ownership of the network remain with mother and daughter companies, the ownership of the transmission network should be transferred from Moldovagaz to an entity that has no links to distribution, transmission, supply or storage and that is legally and functionally unbundled from the vertically integrated undertaking, i.e. Moldovagaz.

If that does not happen, the Secretariat requested in its Reasoned Opinion that ANRE make the final certification conditional upon withdrawal of the supply licence from Moldovagaz.

Furthermore, the Secretariat raised questions about the validity of certification under Article 11 of the EU's Gas Directive.

Under EU arrangements,

when certification is required by a transmission system operator or owner controlled by a person (or persons) from a third country that is neither an EU Member State nor an Energy Community Contracting Party, the regulator is required to decline certification if it has not been demonstrated that the entity complies with the unbundling requirements.

The certification can also be refused if it has not been demonstrated that the certification would not jeopardise the Contracting Party's security of supply.

Since Moldovagaz is majority-owned by Russia's Gazprom, compliance with this article is of prevailing importance, considering that EU buyers have recently experienced "unilateral and unjustified supply cuts from Russia", with some already resulting in awards against Gazprom. [50]

In its Reasoned Opinion, the Secretariat noted that ANRE's preliminary certification did not include a security of supply assessment under Article 11 of the Gas Directive but Buschle said such a report was carried out by the Ministry of Energy over summer 2024 and was due to be submitted.[51]

Depending on the findings of the security of supply assessment, the regulator could withdraw Moldovagaz's supply licence, although Buschle said the issue was particularly sensitive as the company was also facilitating the transit of Russian gas to the Left Bank of the River Nistru.[52]

Buschle said prior to Gazprom stopping the gas exports to Transnistria on 1 January 2025 that if Moldovagaz' supply licence were withdrawn, the Left Bank would be unable to access deliveries.[53]

He said at the time that an unbundling opinion was not the place to "set events in motion", noting that any decision to withdraw Moldovagaz's supply licence would have to be correlated with a plan to reorganise gas supply to the Left Bank.

Views at the time were split in Chișinău on how to handle deliveries to Transnistria, he said. Some argued Russian supply should be cut immediately, while others suggested the contract should be continued until after parliamentary elections in 2025. Still others were maintaining it should be kept in place until expiry of the supply contract in 2026.[54]

Chișinău Divided on Supply Strategy

Opinions in the capital varied: some advocated cutting Russian supply immediately, others proposed maintaining the contract until the 2025 elections or until its expiry in 2026.

Moldovagaz Breaches EU Rule 15

Owned by Gazprom and acting as supplier, Moldovagaz violates the unbundling requirement under Article 15 of the EU Gas Directive.

ANRE'S CERTIFICATION

On 23 August 2024,

two months after the Secretariat had issued its Reasoned Opinion, ANRE issued the final certification of VMTG in line with the ISO model.[55]

The regulator responded to the issues raised by the Secretariat with regard to the Moldovatransgaz–VMTG lease agreement, the Moldovatransgaz–VMTG maintenance agreement, questions related to the clear separation of supply and transmission operations within Moldovagaz as the vertically integrated undertaking and, finally, to concerns regarding the security of supply risks posed by the majority shareholder, Gazprom as a company from a country that is not an EU Member State or an Energy Community Contracting Party.

ANRE said it had assessed the risk of Gazprom controlling transmission assets and found that in the context of the VMTG certification, the lease agreement concluded by the operator with Moldovatransgaz was "an efficient" means of dismissing the risk of influence from a third country on the transmission assets and their operation. Nevertheless, it did not explain the meaning of "efficient" in this context.

ANRE said it had commissioned a security of supply assessment in line with the requirements of the Secretariat and explained that the report had received the approval of the Ministry of Energy, the Ministry of Foreign Affairs, the Ministry of Justice, the Ministry of Economic Development and Digitalisation and the Security and Intelligence Service.

It added it had found that if VMTG were to be certified as an ISO, Gazprom's control over the transmission assets would present no risk to the security of supply of Moldova or any of the other Energy Community Contracting Parties.

ANRE further stresses that as a resource-poor country, Moldova remains fully dependent on gas imports, although the country had made efforts to secure spot volumes for the Right Bank of the Nistru outside a long-term contract signed with Gazprom in 2021 until 30 September 2026.

Nevertheless, ANRE reiterates the fact that the volumes that are still imported via that contract are diverted to the Left Bank of the Nistru, where they are needed for electricity generation to cover demand on both sides of the river.

From that point of view, the Ministry of Energy concluded that Russian gas deliveries to the Transnistrian MGRES power plant were still needed to avoid a humanitarian crisis, considering Moldova's limited options in terms of securing electricity from elsewhere.

ANRE further notes that it had also assessed VMTG's maintenance agreement with Moldovatrangaz and concluded that the two companies' interaction was "efficient" and aligned with the provisions of the actual maintenance agreement of 18 September 2023, listed in annex 1.

It said Moldovatransgaz as the service provider would annually send a list of planned maintenance works. Based on those plans, VMTG would assess the need for weekly or monthly works and draws up internal verification projects on the ground.

In case of breaches of technical standards, VMTG may ask for clarification from the service provider or ask for urgent solutions to address problems.

Finally, ANRE concluded that the VMTG–Moldovatransgaz lease agreement is lawful in line with the provisions of Decision 80 CSE. It notes that during the state of emergency when the lease was signed, Moldovatransgaz was obliged to act with regard to contractual rights and responsibilities as the "sole owner" of the full transmission network which was being leased.

It said the provisions of Decision 80 CSE of 4 September 2023 guaranteed the full legality of the lease. That meant the conclusion of the lease agreement was considered a *fait accompli* once the lease was enforced.

Finally, it noted that it had assessed the Secretariat's concerns with regard to a clear separation of activities, considering that Moldovagaz is a universal supplier and a supplier of last resort, while also being the sole shareholder of the transmission operator Moldovatransgaz.

ANRE said it had taken into consideration the Secretariat's recommendation that activities be clearly separated, including by transferring the entirety of the transmission assets to a fully independent entity. Failure to do so should prompt the regulator to withdraw Moldovagaz's supply

Former energy minister Victor Parlicov meeting with Energy Community director Artur Lorkowski on 8 November 2023.

licence, ANRE observed that Moldovagaz had a public service obligation for 824,884 consumers until 2026. Of the total consumers, 808,697 are households and withdrawal of the licence at short notice would create problems on both banks of the River Nistru.

As a result, it gave Moldovagaz until 30 September 2026 to clarify the separation of supply and transmission activities, insisting that failure to do so would result in the withdrawal of its supply licence.

The unbundling of Moldova's electricity and gas transmission system operators was an overdue achievement, albeit one involving multiple challenges whose solutions are yet to stand the test of time.

Artur Lorkowski remembered that as the Energy Community and Moldovan stakeholders were getting ready to initiate the unbundling process, they were also preparing for all possible scenarios, including the full curtailment of Russian gas supplies.

However, he paid tribute to the regulator ANRE for its professional approach and to the CEO of Moldovagaz, Vadim Ceban, for maintaining a fine balance between the interests of the majority stakeholder Gazprom and the interests of the country in pursuing EU reform and ensuring the divestment process would unfold smoothly without shocks to Moldova's end-consumers.[56]

Throughout 2023 and later in 2024, Moldova achieved several other milestones, including implementation of virtual reverse gas flows, a procedure fully aligned with EU regulations, as well as the launch of organised platforms for the trading of electricity and natural gas.

Nevertheless, its market arrangements remained imperfect as the government had to balance security risks against pressures to liberalise its electricity and gas sectors.

Consult this chapter endnotes at page 211.

CHAPTER 8

Stepping closer to market opening

The unbundling

and certification of Moldova's electricity and gas transmission system operators in 2023 was a milestone in the country's post-independence energy sector but not the only one that year.

At the beginning of 2023, Moldova officially acknowledged and transposed into its customs code the backhaul procedure, a transaction whereby natural gas is transported in the opposite direction to the aggregate physical flow in the pipeline.[1]

The practice has been in use across most EU countries for more than a decade, helping to streamline cross-border gas shipments, and is recognised as a routine operation by traders and gas grid operators alike.

However, discussions related to its implementation in Moldova went through "circles of hell", as recalled by Andrii Prokofiev, head of division of cooperation with clients at the Ukrainian gas grid operator GTSOU.[2]

Implementation of the procedure benefitted from strong support from the Energy Community but was an alien concept to customs officials, who had been familiar only with the physical transport of commodities across its territory. That meant that anyone looking to import or transit goods into or across the country had to declare them.

It was also frowned on by Russia's Gazprom, which issued a statement on its Telegram channel on 22 November 2022, threatening to cut gas supply if imports transiting Ukraine to Moldova were reversed into Ukrainian storage.[3]

Nevertheless, as an Energy Community Contracting Party, Moldova had committed to implementing the EU's gas market regulations and network codes, including rules related to backhaul.

Moreover, the procedure was also included in the interconnection agreement with the Ukrainian gas grid operator GTSOU, which meant that by signing the agreement at the end of 2019, Moldovagaz and Moldovatransgaz, which were the signatories for the Moldovan side, actually acknowledged it.[4]

By 2022, implementation of the procedure on Moldova's borders was becoming particularly important as more companies were looking to transit gas into Ukrainian storage.

The government was also beginning to recognise the possible benefits the procedure could bring, noting that the revenue of the gas grid operator at the time, Moldovatransgaz, could have been 44% higher in 2020 and 2021 than figures reported for those years.

Implementation of backhaul, the government report emphasised, would bring the additional benefit of natural gas being netted out at Moldova's borders with Ukraine, allowing companies to store gas in that country.[5]

As more officials and traders were recognising the merits of backhaul on the Ukrainian–Moldovan border, at least one company started testing the procedure on 28 September 2022, nominating volumes in reverse mode on the Ukrainian border.[6]

Backhaul Adopted into Law

Moldova formally integrated the backhaul procedure into its Customs Code, aligning with EU gas market rules.

Gazprom Threat

Russia's Gazprom warned of gas supply cuts if Moldova used backhaul to divert imports into Ukrainian storage.

Customs Code 215 Passed

Legal changes redefined gas transit to allow virtual reverse flows without requiring customs declarations.

Projected 44% Revenue Increase (2020–2021)

Government reports estimated Moldovatransgaz could have earned 44% more if backhaul had been implemented earlier.

0.553 bcm of Gas Backhauled

More than half of the Right Bank's annual demand was shipped to Ukrainian storage via backhaul routes.

In practical terms, it meant that Russian gas earmarked for delivery in Moldova across the usual Trans-Balkan pipeline would be kept in Ukraine and diverted into local storage facilities.

Nevertheless, although the procedure could be used before its implementation into law as Moldova was still under a state of emergency at the time, officials recognised that it had to be transposed into law.

GTSOU's Andrii Prokofiev recalled how Moldovan authorities struggled at first to grasp the idea of virtual reverse flows.

He said at one point he had even received a call from several Moldovan officials asking why Ukraine needed the backhaul procedure, not fully understanding that it was in fact Moldova that would benefit from it.

However, he conceded that Ukraine had experienced similar difficulties in 2016, when the gas grid operator needed more than a year to convince local customs authorities of the need to implement backhaul in Ukrainian legislation.[7]

Igor Iurco, who was at the time head of transit at the Moldovan Customs Office, recalled having numerous meetings with Moldovagaz and Moldovatransgaz to find examples of EU Member States that had implemented backhaul on their borders.

The first country they researched was Romania but the only reference they could find was related to operational balancing accounts (OBA), a procedure used by gas transmission system operators on each side of a border to manage differences at network interconnection points or to simplify the allocations of capacity to network users.[8]

Iurco remembered having had several discussions with representatives of Vestmoldtransgaz (VMTG), which was operating the Iași–Ungheni interconnector with Romania, who wanted to ensure that gas used to balance the system across the border into Moldova was not subject to customs declarations and taxed as a result.

The concept had already been used in Moldova in October 2021 when the Ukrainian gas grid operator "lent" some gas to the country to help keep the pressure in the system as Russia's Gazprom was refusing to send more supplies to meet rising winter demand.[9]

Following discussions with VMTG in 2022 and inspired by Romanian practices, customs officials agreed to amend Customs Code 346 of 2009 by including a reference to OBA.[10]

Under the amendments, gas that entered the country for balancing purposes had to be declared as being imported for OBA purposes.

May 2024. Moldova holds its first energy congress. On the panel, Victor Binzari, acting director of Energocom at the time, Liviu Duminică, director VMTG, Willem Coppoolse, ERU group director, Andrii Prokofiev, head of department of cooperation with clients, GTSOU.

Once customs recognised the OBA procedure, the next step was to agree to remove a legal requirement for companies to submit declarations for the physical transit of natural gas, instead allowing the gas grid operator to present a table listing the volumes that crossed the country or were consumed internally[11] the previous month. That report had to be presented by the 20th day of each month.

The next step was to acknowledge the backhaul procedure but to do so the customs authority needed to change its perception of what the transit of gas actually involved. Under the transit concept it had been working on, the customs authority argued that commodities could either cross the country or be temporarily stored before being moved elsewhere.

However, to accommodate the backhaul concept, it had to take the view that transit through fixed installations, such as the transit of natural gas through pipelines, ends when a gas grid operator enters the shipped quantities into its accounting records.[12]

As a result, the gas grid operator would be required to present evidence of physically transported volumes indicating the entry and exit points for the shipped gas.

The changes allowed for a more flexible interpretation of what gas transit involved and eventually facilitated the acknowledgement of backhaul. That meant that the importer would be asked to declare physically imported volumes but backhauled gas would not be subject to customs declarations.

The gas grid operator would simply have to present a list of the backhauled gas throughout a given month. The data would then be cross-checked against measurements taken by the grid operator for gas entering or exiting the Moldovan system.

After years of discussions, the amendments were included in Customs Order 170 of 2023 and later incorporated into Moldova's new Customs Code 215 adopted in June 2024.

In hindsight, Iurco is not convinced that backhaul helped to bring more revenue to Moldova as forecast in a government report published in 2022.

However, traders who took part in lengthy discussions, which at times involved representatives of other EU gas grid operators from Poland, Hungary and Croatia, said the procedure helped to revive transit via the Trans-Balkan pipeline, after Russia diverted supply to the Balkans to the TurkStream corridor across Turkey in 2020.

By the final months of 2023, around 0.553 billion cubic metres of gas—or more than half of the Right Bank's annual gas demand—was shipped into Ukrainian storage from Moldova, using backhaul at the Grebenyky and Oleksiivka border points with Ukraine.[13]

REVIVING THE TRANS-BALKAN PIPELINE

With backhaul in place, many companies were also looking at Moldova as an increasingly competitive transit route for gas sourced in southern Europe and shipped into Ukrainian storage.

Discussions began in earnest about establishing a Vertical Corridor using most of the Trans-Balkan pipeline, by reversing the historical north-south direction of the route and encouraging gas to be shipped from Greece or Turkey into Ukraine via Bulgaria, Romania and Moldova.

The idea was strongly promoted by the Energy Community, under its SEEGAS initiative, spearheaded by gas expert Gregor Weinzettel, who believed it would help regional countries integrate their infrastructures and markets.[14]

With Greece and Turkey aiming to establish themselves as major import routes, operating or expecting to bring as many as 10 regasification LNG terminals,[15] in addition to pipeline deliveries from Azerbaijan and Russia, all regional countries expressed an interest in developing transit corridors linking southern Europe to their markets.

Nevertheless, despite the Energy Community's efforts to encourage all regional countries to work together to establish a regional corridor along the Trans-Balkan line, a number of competing projects started to appear.

Romania promoted the Solidarity Ring, a route crossing its southwestern region, to ship gas sourced in Bulgaria to Hungary and further north to Slovakia. In parallel, Moldova and Ukraine promoted the Vertical Corridor, which would follow the exact Trans-Balkan route in reverse.

However, the Romanian section of the Trans-Balkan route linking the southern Negru Vodă–Kardam interconnection point with Bulgaria to the Isaccea–Orlovka IP with Ukraine in the north was also a critical stretch of the Vertical Corridor spearheaded by Ukraine and Moldova, effectively making Romania an essential passageway for both projects.

For most of 2023, the route attracted interest not least because it was commercially competitive despite the fact that gas crossed eight border points from Bulgaria up to Ukraine.[16]

By September 2023, interruptible capacity at the Grebenyky border point with Ukraine was so popular that auctions for capacity bookings at that interconnector were oversubscribed.[17]

However, with the signing of the lease agreement and the transfer of transmission operations from Moldovatransgaz to VMTG in September 2023,[18] the company majority-owned by the Romanian gas grid operator Transgaz requested a transmission tariff increase to recover costs for investments in the interconnecting Iași–Ungheni–Chișinău pipeline, which came into operation in October 2021.[19]

Figure 18. **Vertical Corridor projects**

Source: ICIS.

Prior to the lease agreement, there were two tariffs in operation, one of which was applied to use of the Iași–Ungheni–Chișinău route operated by VMTG, while the other was set for the rest of the Moldovan transmission system operated by Moldovatransgaz.

GTSOU calculated that following the tariff increase, the utilisation rate of the Trans-Balkan pipeline fell more than eightfold from 83% prior to the hike to 10% afterwards, as the cost to ship gas in reverse from Bulgaria into Ukrainian storage increased from EUR 3.00/MWh to EUR 5.00/MWh.[20]

Over the past five years, Moldovan gas tariffs went through periods of peaks and troughs, being low in the period prior to the diversion of Russian transit to TurkStream in 2020 and increasing immediately afterwards to compensate for the loss of revenue. The tariffs were then adjusted downwards to attract more companies to use the route but when all transmission operations were transferred to VMTG they increased again to reflect the latter's investment costs in the Iași–Ungheni–Chișinău line.[21]

By summer 2024, VMTG requested a new tariff increase to raise entry and exit costs by as much as 50%.[22]

This led to fears the increase, subsequently approved by ANRE, would bring the remaining transit to a standstill.

With the latest tariff increase, the cost of shipping gas in reverse along the Trans-Balkan route would increase from EUR 5.00/MWh to EUR 6.7/MWh, eroding further its commercial competitiveness.

Gregor Weinzettel, Energy Community gas expert.
Source: Energy Game.

IMPLEMENTING THE EU'S NETWORK CODES

Many traders interviewed immediately after the hike came into force on 1 September 2024 said the new Moldovan tariffs would deter companies from using that route, opting instead for Romania's south-to-west corridor, which may be cheaper despite the fact that Transgaz itself had increased Romanian tariffs.

Branislava Marsenic Maksimovic, the Energy Community Regulatory Board (ECRB) senior gas and customer expert, said Moldova implemented the EU's tariff network code in June 2023 after long delays, using the default methodology of the tariff network code whereby the revenue of the transmission system operator is allocated to certain interconnection points based on cost drivers such as capacity and distance.[23]

She said the regulator subsequently introduced a measure of equalisation of all entry points but added the regulator was struggling with missing information on forecasting capacity, which was essential to calculate expected revenue.

One of the biggest difficulties in forecasting the volumes and capacity for winter 2023 was the lack of clarity on where gas volumes would come from. That is because, after the 2022 supply crisis, the state wholesaler Energocom was tasked with securing gas for the Right Bank and was doing so by buying on a short-term basis from various regional sources.

That meant that by spring 2023, ANRE could not forecast imports and capacity requirements for winter 2023/2024, let alone for a longer period, as it did not know where gas volumes would come from and in what quantities.[24]

The Energy Community expert said Moldova had higher tariffs in recent years because of the loss of Russian transit, which meant the previous gas grid operator, Moldovatrangaz, was faced with the expenses of running a large system.

Even so, the Energy Community expert said ANRE could have reduced tariffs based on indicators showing the network's utilisation rate, but in that case the issue of cost recovery by the TSO needs to be addressed.[25]

She said that with the lease agreement transferring transmission operations to VMTG, the new operator had been pushing for its own rate of return on investments, justifying it by the higher risk of the Moldovan market.

Moldova's overall progress on implementing the other network codes, particularly the balancing network code (BAL NC), remains slow even following the unbundling of transmission operations in 2023.

Between 2013 and 2017, the EU developed five network codes on interoperability, gas balancing, capacity allocation mechanisms and congestion management procedures,[26] which aim to boost cross-border interconnections and trade among EU Member States.

They were extended to Energy Community Contracting Parties in 2018, which were expected to transpose and implement all of them, except the transmission tariff network code by 2019. The latter was due to be implemented by 2021.

Tariff Hike in Moldova

The Moldovan transmission tariff increase took effect on September 1, 2024. Traders reacted by rerouting gas flows through Romania, which became more competitive despite its own tariff adjustments.

EU Tariff Code Adopted

After significant delays, Moldova implemented the EU transmission tariff network code in June 2023, using the default methodology based on cost drivers like capacity and distance.

No Forecasting Possible

Due to unpredictable gas sourcing by state wholesaler Energocom, Moldova's regulator ANRE was unable to forecast gas imports or capacity needs for the 2023/2024 winter season.

Missed Implementation Deadlines

Energy Community countries, including Moldova, were expected to implement most EU network codes by 2019 and the tariff code by 2021. Moldova was still lagging behind even by 2023.

Nevertheless, by 2023, when transmission operations were unbundled, Moldova was still struggling with their implementation, particularly with regard to balancing.

Branislava Marsenic Maksimovic said one of the main reasons for the delay was the fact that Moldovan stakeholders did not have enough relevant experience, particularly with regard to bundling or allocating capacity on the Ukrainian border.

She said GTSOU could help but the situation was complicated by the fact that the Moldovan system is complex, including many border points. Matters were further compounded by the fact that transmission operations were at the time under the control of Moldovagaz, which is majority-owned by Gazprom.

The expert said the regulator ANRE understood the importance of adopting the network codes but it lacked the capacity to do so and was also aware of the fact that responsibility for driving their implementation lay mainly with the gas grid operator, which had no interest in implementing them.

That meant that the steps taken to implement the network codes were timid, leaving Moldova unable to develop a market.

For example, on the balancing network code, Moldovatransgaz adopted interim measures like offering rudimentary balancing services such as simply contracting additional volumes for technical balancing purposes. There were further proposals to create a balancing platform to stimulate short-term market liquidity but those were later abandoned.[27]

The Energy Community expert said the introduction of balancing services was the simplest solution because the gas grid operator had already been performing such services and added that it was difficult for ANRE to require more complex operations to be performed given the difficult relationship with Moldovagaz and its Russian stakeholders.

Furthermore, progress has been held up by technical and political issues linked to Transnistria. Moldova's gas transmission network spans both banks of the River Nistru but the Left Bank has opposed implementing EU rules, making it difficult for stakeholders on the Right Bank to balance the system.

Officials on the Right Bank have also been claiming they could not balance the system because they did not have access to metering data on the Transnistrian side although the Energy Community expert said she herself had trouble understanding whether data were available or not.

She said the situation had not changed with the transfer of transmission operations to VMTG, which continues to offer interim balancing services, and mentioned that the new operator was facing additional problems regarding access to historical network data held by the previous operator.

A similar situation was reported by GTSOU following its unbundling in 2020, when it had issues accessing historical data from the previous Ukrainian operator, Ukrtransgaz, but Branislava Marsenic Maksimovic said the situation may be more difficult for VMTG now considering that VMTG is a company majority-owned by a Romanian stakeholder and not a familiar Moldovan outfit.

Despite the difficulties facing VMTG, particularly with regard to implementing a functional balancing market, Vadim Ceban, CEO of Moldovagaz, said the best solution to advance the project was for Transgaz to spearhead the coupling of the Romanian and Moldovan markets as Romania had more experience of operating a balancing market.[28]

Nevertheless, VMTG's decision to increase tariffs in 2023 and later in 2024, even without giving ample warning to market participants who had booked transmission capacity expecting to pay a cheaper price, had raised concerns that, along with its main shareholder Transgaz, it may not represent Moldova's interests.[29]

MARKET OPENING

Mistrust in public institutions, state companies and, more generally, the country's legal framework, however, has been an ongoing theme reported by most interviewees selected for this study.

In 2023, for example, private suppliers complained of a breakdown in dialogue with government officials with regard to the introduction of a tax if consumers wished to switch suppliers.

The levy was intended to cover higher costs incurred after the state wholesaler Energocom was tasked with purchasing gas in 2022 for security of supply purposes. The gas was then sold to Moldovagaz, which further delivered it to consumers on the Right Bank.

However, by the end of 2022, prices started to fall, which meant that private suppliers could start buying at cheaper prices on neighbouring markets and sell to industrial consumers in Moldova, effectively undercutting Moldovagaz.

Arcadie Vicol, founder of Natural Gaz, one of Moldova's private gas suppliers said the Commission for Exceptional Situations had introduced Decision 72 of 2023[30] whereby the financial difference up to the costs incurred for the purchase of the more expensive gas would be shared among market participants.[31]

The requirement came despite the fact that private companies, including Natural Gaz, had requested that the price of the more expensive gas be included in a basket of prices and shared equally by all participants.[32]

The regulator said at the time it had informed all participants of proposals in line with EU rules on transparency and free and fair competitive markets.[33]

The tax was repealed at the end of 2023 but Vicol said that although Moldovagaz had covered its costs much earlier, the government did not adjust the regulations immediately to reflect the fact that the shortfall had been offset.

The Ministry of Energy defended the government's position, explaining that the mechanism was needed to correct tariff deviations from a price corridor set by ANRE, noting that the accumulated deviations exceeded 20% above the corridor for the period 2021 and 2022. That meant consumers had to repay them at an average markup of 20-25%.[34]

September 2023, Arcadie Vicol, owner of private gas supplier Natural Gaz with Doug Wood, gas committee chair at Energy Traders Europe (formerly EFET).

CHALLENGING INSTITUTIONAL INERTIA

The difficulties experienced over past years persuaded Arcadie Vicol of the need to establish a natural gas suppliers' association in 2023 to represent the interests of the sector.

Along with a few other colleagues in the sector, he decided to target the 24 companies listed as gas suppliers on the regulator's website. Following some open-source research, he found the contact details for 16 companies, which he invited to join as members. Out of those, five companies responded positively, four of which passed the know-your-customer (KYC) procedure, becoming founding members of the association.

He said that immediately after establishing the association, state institutions such as ANRE began to pay attention and listen to suppliers' proposals although the association may still have a long way to go to establish itself as a voice for the industry.

Nevertheless, he said he was determined to challenge institutional inertia and fight for market liberalisation, recalling that in January 2020 he had sought to become the first private supplier on the market, attempting to bring privately secured gas to his own house.

After notifying Moldovagaz, his supplier at the time, of his intention to switch to Natural Gaz, his own company established in 2019, he applied for a distribution contract but was refused because of disjointed distribution regulations.[35]

After failure to secure the distribution contract, he and his family were disconnected for a week from the gas supply at the end of February 2020 but the regulator ANRE eventually issued a decision for Moldovagaz to resume deliveries to his house.

The experience proved beneficial to the market, setting critical changes in motion, which led to the streamlining of distribution operations by the end of 2020.

As gas prices became more attractive towards the end of 2022, Natural Gaz and other private companies could buy volumes on markets and deliver volumes to end-consumers that year.

By summer 2024, they were covering around 40%, or approximately 10 million cubic metres per month, of the Right Bank's demand.[36]

OPENING THE MARKET

As trading interest has been picking up, the Romanian commodities exchange BRM started testing wholesale forward trades in June 2023 and entered the market in earnest in April 2024, launching a platform for retail trading operated by its Moldovan branch, BRM Est.[37]

The first auctions were held in mid-April 2024 and were initiated at the request of the local thermal power producer CET Nord.

Ion Lupulescu, executive director of BRM Est, said at the time that the platform would bring together Moldova's 23 suppliers and 500 large consumers.

Within six months of the launch of the retail and forward platforms, a total of 6 TWh changed hands on the wholesale market, amounting to half of Moldova's annual gas demand. The volumes on the retail market stood at 80 GWh for the same period.

As the study was completed, BRM Est was preparing to launch its spot gas market at the end of September 2024.[38]

While BRM is positioning itself to become the country's foremost gas exchange as industrial consumers will be required to start buying volumes on the open market from 2025,[39] Romania's other platform, the state-owned OPCOM energy exchange, launched its Moldovan subsidiary Energy Market Operator M in January 2024.[40]

Nevertheless, electricity trading is yet to start in Moldova and regional companies have been warning of the risk of market concentration, particularly after the government announced it would grant monopoly status to the state wholesaler Energocom and the electricity grid operator Moldelectrica for purchases of electricity from the Russian-controlled MGRES plant in Transnistria.

Under the arrangements, Energocom will be the sole buyer for commercial purposes and will be asked to resell the volumes to suppliers at capped or non-capped tariffs, depending on whether retailers are active on the regulated or free electricity markets. Moldelectrica will be the only company in the country allowed to secure electricity for balancing purposes from the same source.

The monopoly status will run until 31 December 2025, with the possibility to be renewed for a new term.

The government said the measure was needed to guarantee the country's transition to a market mechanism and protect Moldova in case of a supply crisis. Most importantly, the measure was arguably taken to ensure suppliers would not be able to secure cheaper electricity directly from MGRES and then sell it on to premium neighbouring markets, which could lead to a domestic deficit.

Nevertheless, the decision will slow down the country's attempt to open the market and sources say it may take years until that goal can be achieved and will depend on Moldova's ability to increase its interconnection capacity with Romania.

The three projects[41] that are currently underway are expected to be completed by 2030 and help the country to wean itself off Transnistrian electricity supply and advance its integration with EU markets.

The three high-voltage lines are the 400 kV Vulcănești–Chișinău line, which will connect Romania to Moldova, bypassing Transnistria, the overhead Bălți–Suceava 400 kV overhead power line and the 400 kV Strășeni–Gutinaș high-voltage line. The first project is expected to be completed by 2025[42] while construction works are yet to start on the other two. All three projects have secured support from international financial institutions as well as USAID.

On the other hand, Moldova launched its first renewable tender in August 2024, auctioning 105 MW of wind and 60 MW of solar capacity and offering potential investors fixed revenue guaranteed for 15 years.

The fixed guaranteed price will be determined during the tender but cannot exceed MDL 1.5/KWh (EUR 0.077/KWh) for wind and MDL 1.67/KWh for solar. Investors were given a deadline of 31 March 2025 to submit their bids.

Once the new wind and solar capacity is brought online, the share of renewable installed capacity in Moldova's overall mix is set to rise from 10% at the end of 2023 to 16.6%.[43] The additional internal and cross-border capacity is expected to help increase market competition, although much of Moldova's ability to follow through with its free-market commitments will depend on a multitude of factors, including the political stability of the country and the wider region in the longer term.

Consult this chapter endnotes at page 214.

CHAPTER 9

History in the making

For Moldovan

officials accustomed to a succession of crises caused by Russia's decision to limit gas supplies for two winters in a row since 2021, the cold season 2023/24 and the first half of 2024 were relatively uneventful.

Nevertheless, this proved to be merely the calm before a fresh storm, as internal disagreements over the purchase price of winter stocks, combined with political risks related to the supply of gas and electricity to both banks of the River Nistru, led to yet another energy crisis with major implications for Moldova and Transnistria.

Throughout most of 2024, gas and electricity prices were falling from record levels reached in the immediate aftermath of Russia's invasion of Ukraine in 2022. Meanwhile, in Moldova, suppliers were fast learning to adapt to an emerging gas market as the country aligned with similar arrangements in neighbouring EU countries.

By the end of April 2024, an obligation imposed by the government in 2023, requiring the state wholesaler Energocom to sell volumes at regulated tariffs to the incumbent Moldovagaz, came to an end, further supporting the opening of the local retail gas market.

The expiry of the public service obligation (PSO) came as BRM Est,[1] the Moldovan branch of the Romanian commodities exchange BRM, launched a retail trading platform in May 2024 after testing wholesale forward transactions in June 2023.

The first registered users included Moldovagaz, Energocom and thermal producers, with other private suppliers following suit.

By the beginning of the summer, however, companies started to raise concerns about winter supplies not only for consumers on the right bank of the River Nistru but also for those on the left bank.

Their worries primarily related to the future of the Russian gas transit via Ukraine, as a five-year agreement to facilitate the shipment of volumes to some buyers in central Europe and to the Republic of Moldova was set to expire on 1 January 2025.

The Right Bank had not been off-taking Russian gas via this route since the end of 2022, opting instead to divert its contractual share to the Left Bank in lieu of electricity generated at the local MGRES power plant and returned to Moldovan consumers.

Officially, many Ukrainian government representatives were adamant that the transit agreement would not be renewed, even though some of them, including President Volodymyr Zelenskyy, were inclined to accept an arrangement under which gas touted to be of Azeri origin could be transported across from the Russian border to EU buyers in Slovakia or Austria.[2]

Despite the confusing messages, most state representatives in Moldova were confident that the deal would be extended beyond 1 January 2025, expecting Moscow to shield Russian-speaking consumers in Transnistria from a winter supply crisis.

Meanwhile, with a drawn-out series of elections on the horizon—starting in autumn 2024 with presidential elections and a referendum to enshrine Moldova's path to EU accession in the constitution and ending with parliamentary elections a year later—the political elite had been keen to retain the electorate's loyalty by keeping utility bills low.

As the supplier of last resort, the state company Moldovagaz started to buy some smaller volumes for front-month delivery between April and June and, in July, was looking to secure more than 600 million cubic metres (mcm) needed for winter delivery.

SUMMER TRADING

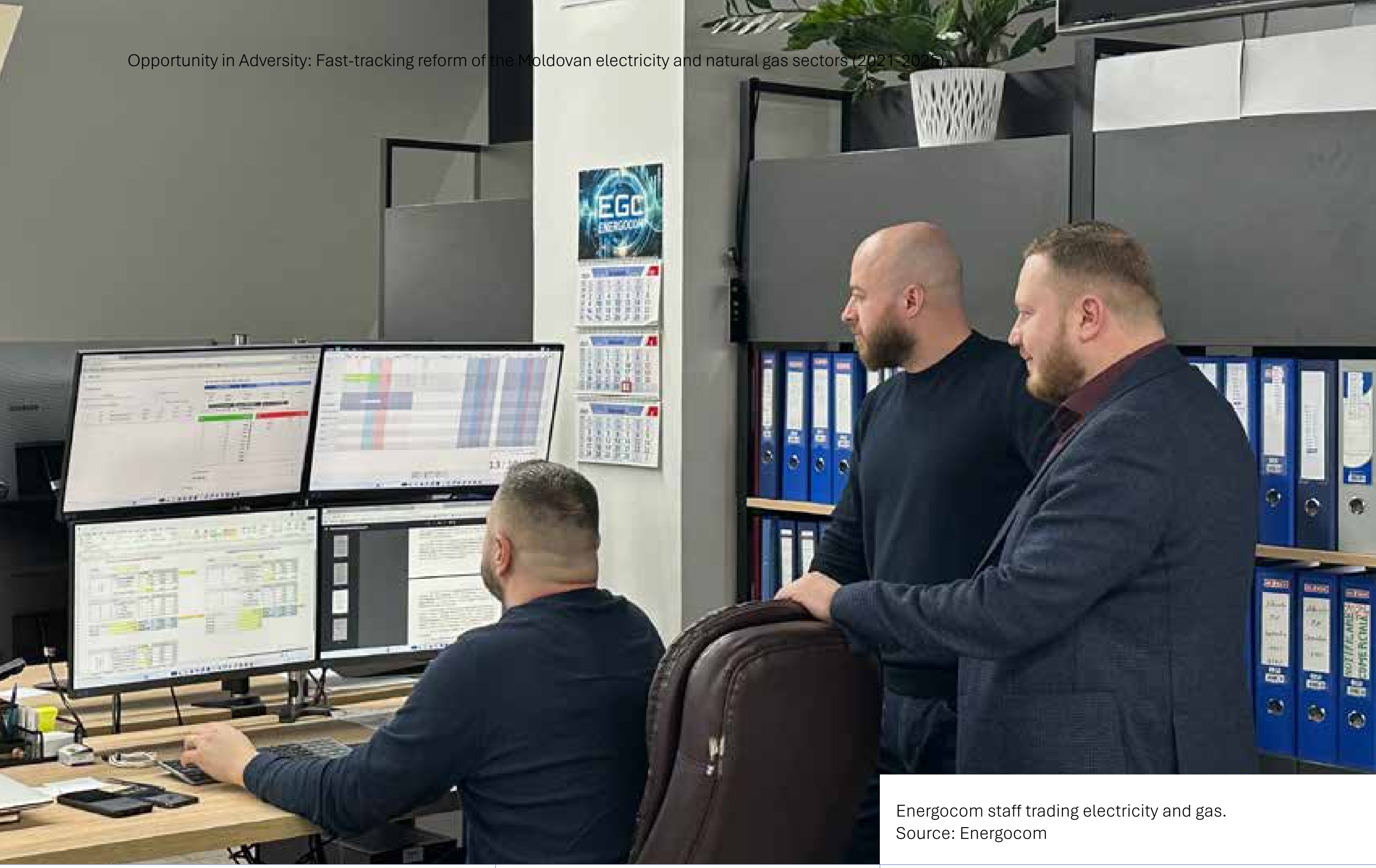
On 19 July, Moldovagaz entered the market, placing bids for three lots to be delivered in October 2024, November 2024 – February 2025 and March – April 2025.

Data published on the BRM Est platform show that three large bids were placed on the day. These included a first lot of 39 mcm for October 2024, another lot of 501 mcm to be supplied between November 2024 and February 2025 and a third lot of around 135 mcm for delivery in March and April 2025.[3]

The tenders were cancelled not only because no regional sellers could offer such large volumes in one trading session, but also because they included a flexibility element, with Moldovagaz aiming to secure 20% more or less than initially indicated in the buy tenders, depending on the demand profile of its consumers.

Following the cancellation and questions raised by one of the company's supervisory board members at the time,[4] Moldovagaz changed its strategy, dividing the targeted volumes into quantities for fixed and flexible deliveries and initiating a flexible buy tender for 120 mcm on 1 August 2024.

Once again, the transaction failed because traders could not offer the requested quantity in full, asking



Energocom staff trading electricity and gas.
Source: Energocom

Moldovagaz to break it down into smaller lots of up to 30 mcm.

Moldovagaz subsequently decided to split the 120 mcm for flexible delivery into five lots, scheduled to be tendered on 7 and 8 August.

However, of the five lots, which Moldovagaz expected to lock in over the two days, only three tendered on 7 August were successful.

After that date, Moldovagaz struggled to buy volumes amid disagreements with the Ministry of Energy over the purchasing strategy for winter volumes.

The conflict led to a domestic scandal that culminated in a 30% gas tariff hike for end-consumers and the dismissal of three high-level stakeholders, including the then energy minister Victor Parlicov, just as the winter season was approaching.

In a letter to the Ministry of Energy dated 4 November, which has been seen by the author, Moldovagaz stated that it had initiated 72 buy tenders since April 2024, but of those only 17 had been successful, covering delivery periods between May and December 2024.

The remaining 55 tenders, including auctions for winter deliveries, failed either because the lots that had been tendered were too large and traders could not offer such volumes in single clips or because the prices offered exceeded the values expected by Moldovagaz or the Ministry of Energy.

Most of the disagreements were in fact linked to the latter.

State wholesaler Energocom was expected to secure gas on neighbouring European hubs, which it then sold to Moldovagaz as part of back-to-back deals concluded via the BRM platform. As a standard practice, it added the cost of shipping the gas and its own margin to the purchase price.

Moldovagaz Enters Market with Large Bids

Moldovagaz placed three major bids totalling 675 million cubic meters (mcm) for delivery between October 2024 and April 2025, but tenders were cancelled due to lack of sellers and requested flexibility.

Flexible Volume Tender Attempts

After initial failures, Moldovagaz split a 120 mcm flexible tender into five smaller lots; only three were successfully tendered on August 7, with further purchases hindered by disagreements with the Ministry of Energy.

72 Tenders Launched, Only 17 Successful

Since April 2024, Moldovagaz initiated 72 gas purchase tenders, but only 17 succeeded, with most failures due to oversized lots or offered prices exceeding Moldovagaz and Ministry expectations.

Geopolitical Impact on Prices

Prices surged after Ukraine's military offensive in Kursk Oblast, seizing a key gas metering station, complicating purchasing efforts amid volatile market conditions and prompting close coordination requests from the Energy Minister.

However, documents seen by the author, including correspondence between Moldovagaz and the Ministry of Energy, Moldovagaz and the Security and Intelligence Service (SIS), as well as minutes of a meeting held with stakeholders in August 2024, reveal diverging views on Moldovagaz' purchase strategy.

On the one hand, the incumbent insisted that it was looking to secure volumes at levels below the EUR 42.60/MWh regulated tariff, which was used by the regulator ANRE as a reference value to set end-consumer tariffs.

On the other hand, the Ministry of Energy had hired a specialist from the banking sector to provide in-house gas price forecasts based on technical and macroeconomic drivers.

Analyses shared by market participants show the outlooks produced by the ministry were forecasting a TTF reference price of EUR 34.50/MWh for the late summer months. However, it was unclear whether this "pivot price" referred to spot or forward contracts.

According to BRM Est data, Moldovagaz secured 75.6 mcm on 7 August at prices below the regulated tariff of EUR 42.60/MWh.

Nevertheless, it failed to buy the difference of up to 120 mcm for flexible winter delivery the following day because, by then, the two offers of EUR 43.99/MWh and EUR 44.43/MWh that it received were higher than the regulated price.

Market prices started to soar after Ukraine launched a military offensive across the border in Russia's Kursk Oblast on 6 August, capturing the Sudzha gas metering station, a key facility for the transport of gas.

Minutes of the meeting held on 6 August and involving senior ministry representatives, the acting CEO of Moldovagaz and the then acting director of state wholesaler Energocom include a request by the former energy minister Victor Parlicov for Moldovagaz to remain in close communication with regard to additional tendering rounds amid concerns over high price volatility linked to geopolitical developments.

A month later the Ministry of Energy sent a letter to Moldovagaz, expressing confidence that prices would fall amid low demand. In fact, however, they followed an upward trend, gaining ground throughout the autumn months.

Sergiu Tofilat[5] and the former energy minister Victor Parlicov[6] said that they had concerns over Moldovagaz and Energocom's lack of purchasing strategy for winter supplies.

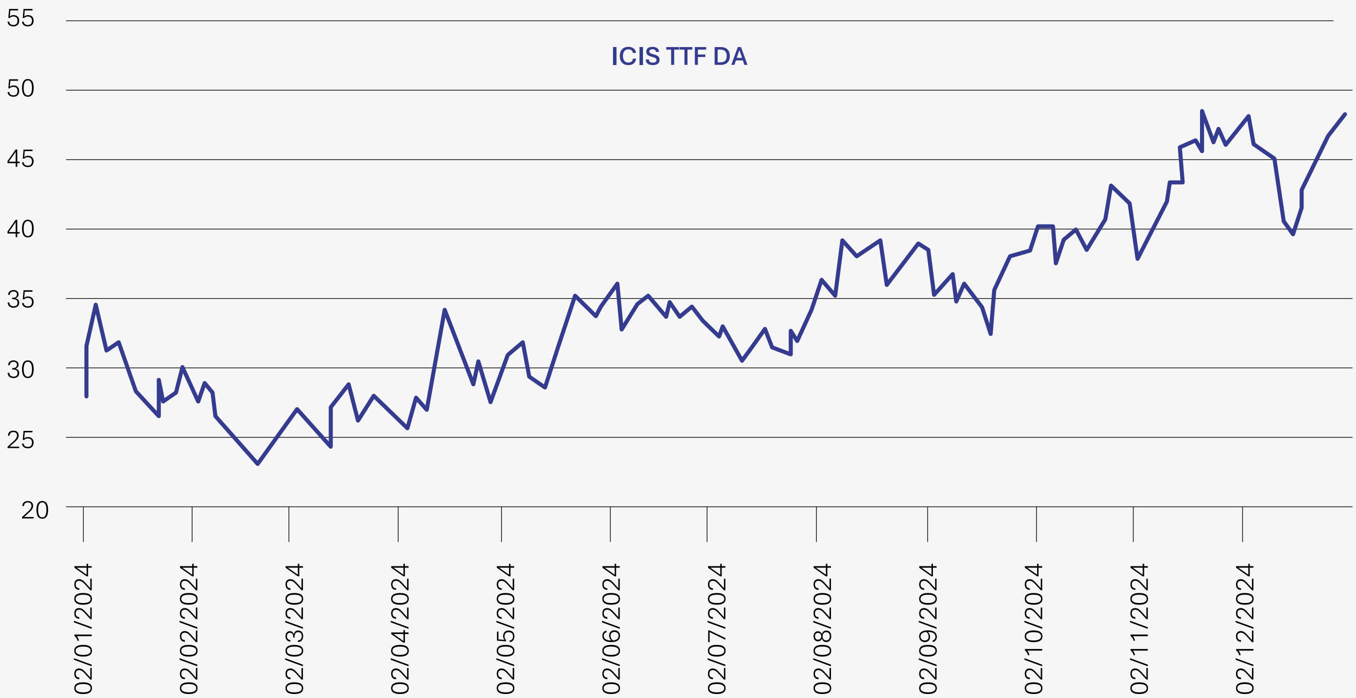


Figure 19. **ICIS TTF Day-ahead gas prices in EUR/MWh**
Source: ICIS.

In an interview for this study, Parlicov said he did not trust the price forecasts used by Energocom to guide its purchases and confirmed he had commissioned in-house price forecasts, which took fundamental and macroeconomic drivers into consideration.

Moldovagaz, however, insisted during the 6 August meeting that having a purchasing strategy would be pointless because prices were impossible to predict in such a volatile geopolitical environment.

Market participants who were involved in the discussions, as well as those following them from the sidelines, described the situation as "absurd".

One trader,

who wished to remain anonymous, said the Ministry of Energy was trying to micromanage the situation amid fears prices would spiral out of control, leading to higher tariffs for end-consumers ahead of the elections.

Parlicov denied the claims, emphasising that Energocom was concluding back-to-back deals with Moldovagaz and that the ministry was merely recommending they follow the pivot price included in the market forecasts rather than forcing them to track it closely.

He agreed that the ministry should not have produced price forecasts, given that there are international companies specialised in such services. However, he insisted that they were necessary for understanding market movements in the absence of a purchase strategy by either Moldovagaz or Energocom.

Traders interviewed for this book, however, said Parlicov had political ambitions of his own, with plans to set up a new pro-EU party as an alternative to the ruling PAS and hopes of mustering electoral support.

Other interviewees believed that, in the absence of winter supplies secured from the market and with prices rising, Moldovagaz could resume Russian imports for Right Bank consumers, two years after these were stopped.

A letter from Moldovagaz to the Ministry of Energy, leaked to the author in October 2024, said the company's acting CEO Vadim Ceban had travelled to St. Petersburg for discussions with producer Gazprom on the possible resumption of exports to the Right Bank from 1 January, raising fears that the return of cheap Russian gas would undercut other suppliers on Moldova's emerging market.

Talks did not materialise but Tofilat conceded the government was not "ideological" about the return of Russian gas because its priority was to secure cheap gas.[7]

On 25 November, the then energy minister Victor Parlicov flew to St. Petersburg to meet Gazprom's CEO Alexey Miller after receiving an invitation to discuss three issues: the delivery of Russian gas to Moldova, Moldovagaz' historical gas debt and issues related to the company's administration council.

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RUSSIAN VISIT

Parlicov recalled that the agenda with Russian counterparts was vaguely worded, which meant that when he arrived it was unclear whether Gazprom intended to discuss supplies to both banks of the River Nistru or only to Transnistria following expiry of the Ukrainian gas transit.

In hindsight, he said, his main goal was to understand whether the Russian producer was ready to use the alternative shipping route via Turkey to supply gas to Transnistria after the expiry of the Ukrainian transit agreement on 1 January. Two days before flying to St. Petersburg, he had travelled to Turkey to meet local industry representatives, who told him they would be ready to offer additional transmission capacity if Gazprom was also willing to send more gas.

He denied claims he wanted to talk about the resumption of Russian gas exports to Right Bank consumers, but confirmed the issue had been discussed by Moldovagaz with senior members of the government.

On 25 November, however, Miller made it clear that if Moldova reached an agreement with Ukraine for continuation of the transit, gas would flow to Transnistria. Parlicov said Gazprom did not specifically pledge to send additional volumes for Right Bank delivery but noted that the producer's priority was continuation of the transit. In the case of no transit, Gazprom would consider booking transmission capacity via the alternative Turkish route if Moldovan authorities agreed to acknowledge the historical gas debt for Right Bank consumers, which Gazprom claims stands at EUR 709 million.

In a nutshell, Parlicov said Gazprom insisted that if the transit continued after 1 January there would be no supply problems to Transnistrian consumers on the Left Bank and Gazprom would not be concerned with the Right Bank's historical debt.

However, if the transit stopped, there could be disruptions unless Moldova agreed to address the Right Bank's debt.

Parlicov is convinced Miller knew the transit would stop, particularly after Ukrainian officials declined discussions with the acting CEO of Moldovagaz on the possibility of registering as a shipper with a view to booking transit capacity via Ukraine after 1 January 2025.[8]

Gazprom did not respond to an invitation to comment. However, Sergiu Tofilat, who was following events closely, said the trip was, in fact, the outcome of a power struggle between the former energy minister, the acting CEO of Moldovagaz and Prime Minister Dorin Recean.

Tofilat said Parlicov was keen to replace the executive board of Moldovagaz, particularly after the mandate of CEO Vadim Ceban expired on 25 June 2024. Immediately afterwards, the supervisory board managed to persuade Gazprom, as the main shareholder, to accept a temporary executive board until new members were recruited.

However, the issue dragged on, prompting Gazprom to include it on the discussion agenda during Parlicov's trip to St. Petersburg. Nevertheless, as the visit concluded, it became clear that the former minister would return empty-handed to Moldova, having failed to secure promises on any of the three items slated for discussion.

Gazprom made no pledge to provide alternative arrangements for Transnistria in case the Ukrainian transit stopped. It refused to accept Parlicov's proposal to change Moldovagaz's senior leadership and threatened to make gas supplies to the Left Bank contingent on resolution of the Right Bank's historical debt.

As a result, within days of Parlicov's return to Moldova, Prime Minister Dorin Recean terminated his mandate and that of Victor Bînzari,[9] then acting CEO of Energocom, and called on Sergiu Tofilat to resign from his position as Moldovagaz supervisory board member.

In hindsight, Tofilat said Parlicov should never have travelled to Russia, but believes he was set up by political rivals to discredit him. He pointed out that just as the former minister was travelling back to Moldova from St. Petersburg, Moldovagaz requested a 30% rise in end-consumer gas tariffs. At the same time, a local journalist leaked parts of the minutes of the 6 August meeting, allegedly revealing that the minister was responsible for the lack of gas purchases ahead of winter by Moldovagaz.[10]

As Parlicov was dismissed, Moldovagaz started to buy all the outstanding gas volumes for delivery between January to April, concluding several tenders between 3-13 December at prices hovering around EUR 57.00/MWh.[11]

Ukrainian Transit Agreement Expires

Gazprom considered using an alternative gas route via Turkey to supply Transnistria after the Ukrainian transit agreement expired, contingent on Moldova acknowledging the Right Bank's historical gas debt.

Gazprom's Official Position

Gazprom confirmed gas supplies to Transnistria would continue if the Ukrainian transit persisted but made no promises for Right Bank deliveries without transit.

Moldova's Prime Minister Dorin Recean

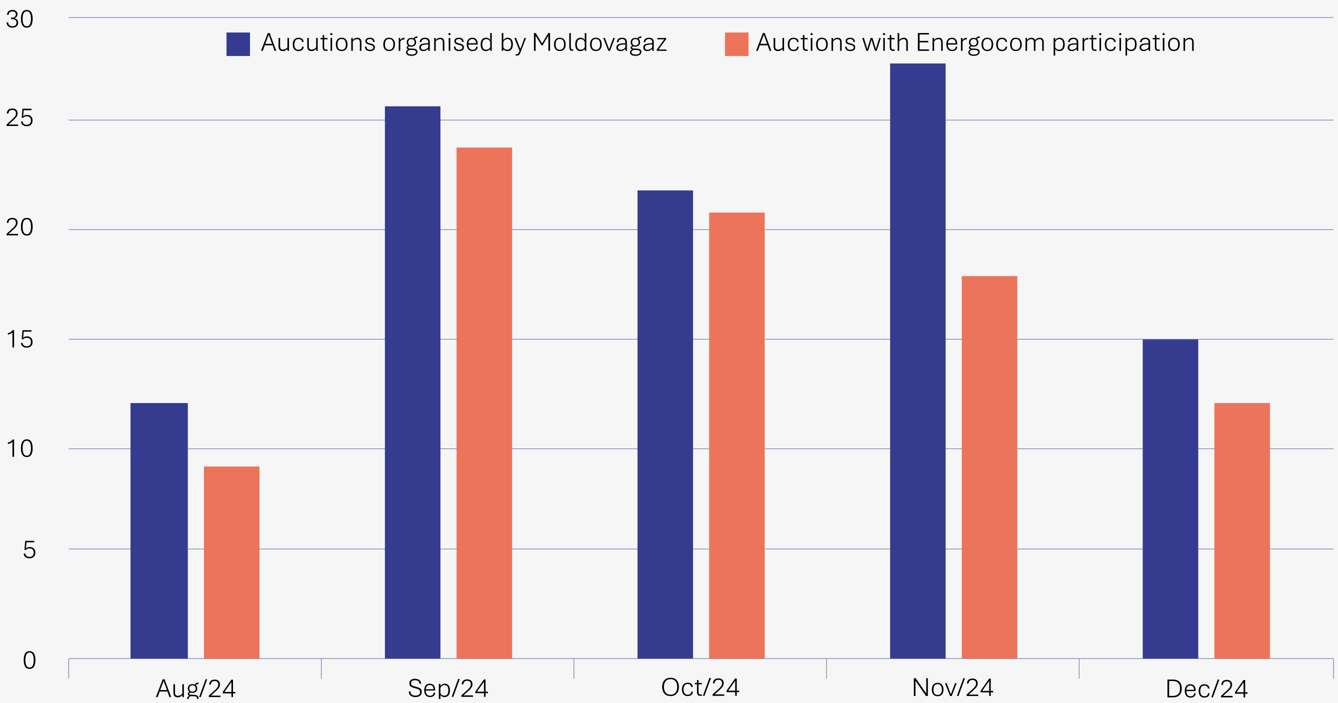


Figure 20. **Number of gas auctions with Moldovagaz and Energocom participation**

Source: Energocom.

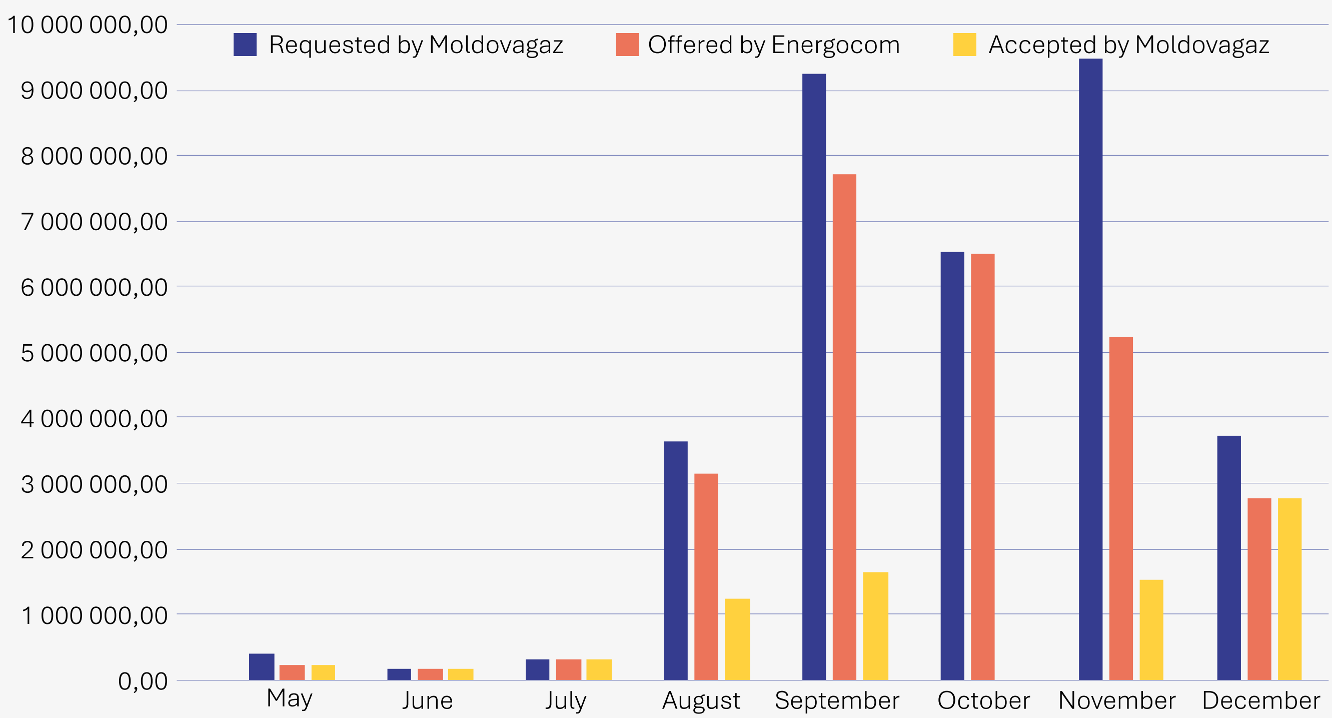


Figure 21. **Gas volumes (in MWh) traded on BRM Est in 2024**

Source: Energocom.

Energocom said the ministry's insistence on sticking to the pivot price of EUR 34.50/MWh included in its in-house analyses had inflicted economic and reputational damage on the country.[12]

Eugeniu Buzatu, acting CEO of Energocom, said the company received attractive offers for winter supplies from European sellers throughout the summer and autumn months.

These offers were in line with European hub prices, although they were admittedly higher than the ministry's reference price of EUR 34.50/MWh. As a result, Energocom could not buy volumes with a view to selling them on to Moldovagaz, a point that was confirmed by the latter in its letters to the ministry and the Security and Intelligence Service.

Buzatu said Romanian producer Romgaz had offered volumes on several occasions but eventually lost interest as Energocom could not buy due to concerns the offers it was receiving were not aligned with the ministry's pivot price.

He said Parlicov had tried to persuade his Romanian counterpart, Sebastian Burduja, to sell volumes to the Right Bank at the regulated tariff of New Leu (RON) 120.00/MWh (EUR 25.00/MWh) paid by Romanian consumers. This tariff was around half the market prices in late autumn last year but the Moldovan proposal was rejected by the Romanian side.[13]

Buzatu believes that if Energocom had been able to buy volumes at the prices offered by European sellers in summer and autumn, end-consumer tariffs would not have risen by 30% as they did in December 2024 and would, in fact, have dropped by 10%.

Parlicov, however, rejected the claims, insisting that he had never forced Energocom to stick to the EUR 34.50/MWh pivot price, adding that the issue was used to sideline him politically, while also ensuring that no real change would occur, particularly with regard to the Moldovagaz leadership.

He also believes Gazprom had sought to use him and Moldova to pressure Ukraine into continuing the transit, threatening to create a supply crisis in Transnistria if Moldova failed to persuade Kyiv to continue shipping Russian gas.

Furthermore, he noted attempts by Gazprom to rally support among certain European companies, which circulated a letter with a number of signatories calling for the continuation of the transit after 1 January.[14]

Meeting with the Administration Council (full composition) of the National Agency for Energy Regulation (ANRE) of the Republic of Moldova. Left to right – Alexandru Ursu, Eugen Carpov, Artur Lorkowski, Violina Spac, Veaceslav Untila, Alexei Taran. 5 February 2025. Source; Energy Community

Two of the companies listed as potential signatories were Energocom and Moldovagaz. The former declined to sign, but Moldovagaz sent a note to the ministry, expressing willingness to travel to Austria, where it was expected to endorse the letter.[15]

In the end, the transit failed to materialise and Gazprom unilaterally stopped supplies to Transnistria from 1 January 2025.

Nevertheless, all interviewees said Moldovan officials had refused to accept that Russia would cut supplies until the very final days of 2024, when the first concrete signs emerged.

Parlicov said[16]

it became clear to him that Russia had no intention of shielding Transnistria from any crises after it bombed an electrical substation at Podolsk in Ukraine at the end of November.

The substation was critical for providing electricity to the Rîbniţa steel plant, one of the key industrial producers and employers on the left bank of the River Nistru.[17]

When working at full throttle, the steel plant needs 100MW of operating electricity capacity, some of which was destroyed last year, prompting the operator to close the plant partially, firing 2,500 employees at the end of last year.[18]

Furthermore, Tofilat noted that as Ukraine continued to refuse the renewal of the transit, Gazprom could have made alternative arrangements to ensure Transnistria was supplied via a southern route. This would have meant booking transmission capacity on the Trans-Balkan corridor at various interconnection points, including on the borders of Turkey–Bulgaria, Bulgaria–Romania, Romania–Ukraine and Ukraine–Moldova.

Gazprom had an opportunity to book this capacity on 16 December in line with a European calendar for monthly bookings but declined to do so.

Failing to secure monthly transmission capacity, Gazprom could have still booked it on a daily basis starting on the last day of December for gas deliveries beginning on 1 January. However, it failed to book capacity here too, providing the clearest signal yet it was not interested in supplying gas to Transnistrian consumers.

On 11 December, Moldova's Commission for Emergency Situations (CSE) declared a state of emergency for 60 days, starting from 16 December, claiming the measure was "necessary in the context of major risks to Moldova's energy security and possible humanitarian effects on the eft bank of the Dniester, caused by the uncertainty over Gazprom's natural gas supplies to the Transnistrian region, especially in the context of attacks on the energy infrastructure in Ukraine".[19]

THE TRANSNISTRIAN CRISIS

On 1 January 2025,

at 6:00 am Central European Time, the Russian gas transit through Ukraine stopped, halting supplies to Europe and Moldova.

Up until then, Moldova was receiving an average of 5.7 mcm daily, which it diverted to Transnistria for local consumption and the production of electricity at the MGRES power plant. Some of this output would be transmitted back to the Right Bank.

As warned by Miller during his talks with Parlicov in November, Gazprom conditioned the resumption of gas supplies to Transnistria on Moldovan authorities acknowledging the historical debt for gas delivered to the Right Bank until 2015.[20]

Constantin Borosan, state secretary at the Ministry of Energy, questioned Gazprom's argument,[21] noting that although Transnistria was affected by the gas curtailment, the Russian producer made the resumption of supplies conditional on Moldova acknowledging the debt for the Right Bank, rather than the Left Bank's debt, which by now was approaching USD 11 billion.[22]

With the end of the gas transit, Transnistria switched some of its generating capacity to coal and stopped electricity deliveries to Moldova altogether.

Borosan said he was surprised to see Transnistria suffered an electricity supply deficit almost immediately, prompting local authorities to introduce rolling blackouts from as early as 3 January.[23]

In hindsight two sources with knowledge of Transnistrian political and economic activities who did not wish to be identified told the author that the Left Bank may have continued energy-intensive crypto-mining operations even as it was struggling with a major electricity supply deficit. The information could not be officially confirmed because local authorities did not respond to an invitation to comment.

At the beginning of December, Transnistria had started to accumulate gas in pipelines, preparing for a potential supply curtailment and hoping to "borrow" some volumes from neighbouring Romania or Ukraine under a technical procedure known as an OBA (operational balancing account).[24]

Nevertheless, with the loss of transit, Ukraine itself could no longer offer access to larger amounts of gas in pipelines, just at the time that Transnistria needed between five to ten million cubic meters to maintain pressure in the system.

To save the gas that had accumulated in pipelines, Transnistrian authorities cut any supplies to rural areas and were hoping to use coal-fired electricity for heating needs.

However, the technology at the MGRES power plant was too old to cope with the spike in demand. Borosan said the operator could barely ramp up a coal-fired unit with a nominal capacity of 200MW to operate at a maximum of 170MW. Meanwhile, demand was peaking at 215MW.

With gas supplies cut, many consumers switched on electrical devices or improvised heating installations, leading to no fewer than ten fires and two deaths in the first two weeks of January 2025.[25]

As the electricity transmission system was unable to cope with the load, authorities mandated rolling curtailments of up to five hours per day, which meant that water deliveries dependent on power supplies were also halted.

The situation was different on the Right Bank, where consumers had access to natural gas for heating and cooking but were facing an electricity deficit after Transnistrian supplies stopped.

Up until the start of the year, Moldova was importing around 50% of its electricity needs from Transnistria's MGRES, with the remaining half covered by local generation or Romanian imports.

Anticipating a supply crisis from 2025, Energocom, decided to increase imports, reaching an agreement with Romanian nuclear producer Nuclearelectrica to sell greater volumes. As a result, Energocom increased the capacity offered in its bilateral contract from 70MW to 100MW in January and 120MW in February.

Energocom also approached Romanian state hydro producer Hidroelectrica, requesting the sale of additional electricity supplies, but the company stated that it could only offer 20MW due to facing a deficit linked to drought in 2024.

This meant that the only way to cover the shortfall was to buy more electricity on a spot basis from the Romanian exchange OPCOM, even if that meant higher prices.

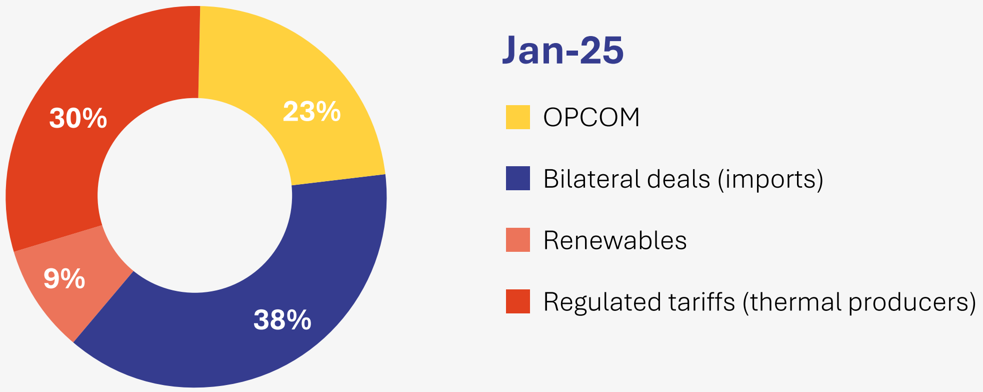


Figure 22. Energocom electricity purchases in January 2025
Source: Energocom.

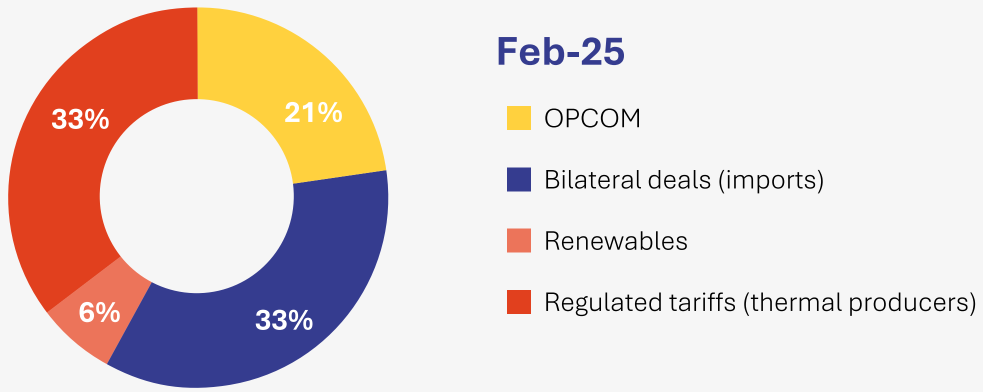


Figure 23. Energocom electricity purchases in February 2025
Source: Energocom.

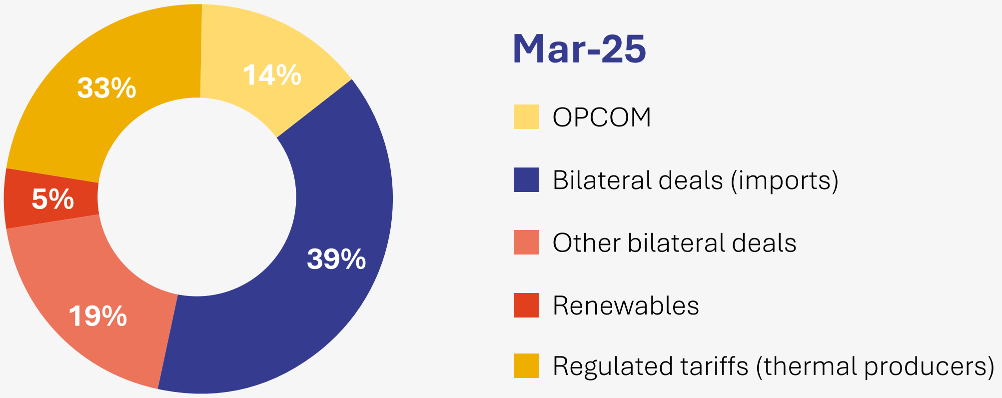


Figure 24. Energocom electricity purchases in March 2025
Source: Energocom.

Nevertheless, the greatest challenge was securing the interconnection capacity to import the electricity from Romania. Since 2022, Moldova and Ukraine were synchronised with the European continental grid and were allowed to import and export electricity as a block.

Import Capacity Limit:

315 MW

Moldova received only 15% of the total Ukraine-Moldova block capacity (1,700 MW in summer, 2,100 MW in winter), limiting its commercial import capacity to 315 MW — about half of its import needs for winter 2025.

Capacity Reallocation Mechanism

To address the deficit, Moldelectrica and the Ministry of Energy implemented a mechanism to reallocate unused capacity from Ukraine's D-2 auctions to Moldova on a D-1 and intraday basis, increasing import capacity.

Risk of Humanitarian Crisis in Winter

With plunging temperatures and gas nearly depleted in pipelines, authorities and suppliers faced a critical situation in Transnistria—lack of heating, electricity, and water—requiring urgent action to prevent a major humanitarian crisis.

During the summer months, the combined import capacity allocated to both stood at 1,700 MW, increasing to 2,100 MW during winter.

Of the total capacity allocated to the Ukraine–Moldova block, Moldova was able to receive only 15%, which meant that its commercial import capacity was limited to 315 MW, representing around half of its import needs in the winter months of 2025.

To address the deficit, the electricity transmission system operator, Moldelectrica together with the Ministry of Energy and counterparts from neighbouring TSOs developed a mechanism to reallocate underutilised capacity.

Eugeniu Bot, Energocom's head of electricity department, stated that two options were implemented.

Firstly, they took advantage of the fact that Ukraine's auctions for daily capacity reservations with Slovakia and Poland were conducted on a D-2 basis. This meant that the calculation and allocation of cross-zonal capacity were performed two days before the day of delivery for day-ahead market trading.

As a result, any capacity that was not booked on a D-2 basis for imports into Ukraine, was transferred to Moldova, which could book capacity on a D-1 basis, meaning that the allocation of capacity was performed one day before the day of delivery.

The principle was also applied to shorter periods of time on the intra-day market. Under this arrangement, any capacity that Ukraine did not use with other neighbouring countries, such as Romania or Hungary, on a D-1 basis was reallocated to Moldova on an intra-day basis.

Bot said the process had been particularly risky because very often Energocom had to buy electricity before 13:00 Eastern European Time, when the spot market closed on the Romanian Opcom platform and wait until 19:00 to see whether it could obtain additional intra-day capacity.

From 1 January 2025, Energocom had been booking not only daily capacity but also participating in five intra-day tenders each day, reserving capacity at regular intervals of time over 24 hours.

Despite the risk and considerable difficulties, Energocom had no choice but to secure additional capacity. Nevertheless, the process ran smoothly, with Energocom keeping consumers fully informed about their energy purchases and the demand-supply situation in the country, posting regular messages about their daily activities on social media.

However, the situation was becoming desperate in Transnistria, as the region's 350,000 inhabitants had no access to heating and extremely limited supplies of electricity and water at the height of winter.

Right at the start of the year, Moldovagaz announced that it had been working with Energocom to secure gas on neighbouring hubs for delivery to Transnistria.

Eugeniu Buzatu confirmed that the state wholesaler had bought 240 MWh on Bulgaria's Balkan Gas Hub to test reverse exports to Transnistria via the Trans-Balkan route at the end of 2024. Although the process was successful in technical terms, the offer was not accepted by Transnistrian authorities.

Under the proposed arrangement, Energocom was planning to buy gas on EU hubs at market prices and sell it to Moldovagaz, which would then deliver it to its subsidiary Tiraspoltransgaz for use on the Left Bank.

On 3 January, Transnistrian authorities rejected the offer, citing high and volatile gas prices on free markets, and insisted that they would wait for Gazprom deliveries under the existing mid-term contract.

Three days later, Moldovagaz and Energocom renewed the offer but Transnistrian authorities declined it once again, reiterating that they would wait for Gazprom to deliver gas under the existing mid-term contract.

While the Ukrainian gas transit remained in place, Transnistria received Russian gas via Moldovagaz at minimal cost.

However, with the loss of transit, any gas supplied would have to be paid for, placing severe strain on the impoverished region. The challenge, therefore, did not lie in securing the gas, which could be bought on any of the neighbouring EU hubs, but in finding the means to pay for it.

After a short trip to Moscow in mid-January, Transnistrian President Vadim Krasnoselsky announced that a solution had been found, whereby Russia would deliver gas to the region on a "humanitarian basis".[26]

Details emerged at the time that Natural Gaz D.C., a local Moldovan supplier, had engaged in discussions with Tiraspoltransgaz on the possibility of buying gas on European hubs and delivering it to directly to the Transnistrian supplier.

Arcadie Vicol, owner of Natural Gaz D.C., confirmed the details and said his company had also been preparing to supply gas, testing the Trans-Balkan route in reverse in November 2024.[27]

By mid-January he had a framework agreement in place with Tiraspoltransgaz and was awaiting confirmation of payment details for gas purchases. He said Tiraspoltransgaz had assured him that the money would be made available and added that, under the arrangement, Tiraspoltrangaz would even pay value added tax for gas delivered into Transnistria via Moldova.

The contract was finalised on 14 January, with the counterparties still to agree on delivered volumes and payment methods the following day.

However, shortly after, he received a call from Moldova's Security and Intelligence Service (SIS), inviting him for talks. He said that when he left an hour later, newspapers were already buzzing with leaked information suggesting he was under investigation for treason.

The Ministry of Energy raised doubts about the proposed deal, noting that in the past local suppliers supported by sanctioned oligarchs had promised cheap gas deliveries to undermine the government.[28]

Constantin Borosan insisted that the terms of the deal sought by Natural Gaz D.C. also contradicted amended legal provisions, which stipulate that a supplier's licence is valid only in areas of the country where there are licensed gas grid operators. The only exception to this rule is Moldovagaz' delivery to Transnistria under the terms of the mid-term contract with Gazprom because the agreement was signed before the amendments came in force.

In other words, Moldovan suppliers licensed on the Right Bank can only supply within this region, as the grid operator, VMTG, is the only licensed operator.

As a result, Natural Gaz D.C. was disqualified from concluding a direct supply agreement with Tiraspoltransgaz.

Nevertheless, the situation was becoming more critical by the day, especially as temperatures were set to drop significantly at the beginning of February.

Constantin Borosan and Victor Bînzari, who had since become an advisor to the Energocom CEO, recalled attending a meeting in Bender, on the Transnistrian–Moldovan border, where they struggled to hold a pen because of the freezing temperatures in the room.

With the predicted cold spell approaching and the gas held in the pipelines nearly exhausted, stakeholders had to take urgent action to avert a major humanitarian crisis.

On February 3 and 4, 2025, representatives from the Ministry of Energy, SA "Energocom," ÎS "Moldelectrica," S.R.L. "Vestmoldtransgaz," and the representative of the Reintegration Policies Bureau conducted working visits in the town of Rîbnița: at SA "Moldovan Metallurgical Plant" and SATÎ "Cement Plant," as well as in Tiraspol: S.R.L. "Tiraspoltransgaz," the Brick Factory, the Tehnopark company, and the "Tirotex-Energo" Thermal Power Plant, as well as the Thermal Power Plant located in the town of Dnestrovsc.

THE EU STEPS IN

Artur Lorkowski, director of the Energy Community, and Predrag Grujičić, head of the Energy Community's gas unit, had been following discussions about supplies to Transnistria after expiry of the Ukrainian gas transit for nearly a year.

Both were keenly aware of Moldova's vulnerability to energy supply disruptions, having been heavily involved in supporting Right Bank stakeholders during some of the country's worst energy crises since 2021, when Gazprom restricted supplies for two consecutive winters.

Grujičić stated that the Energy Community held regular discussions with Moldovan authorities throughout 2024, asking what plans were being put in place to secure supplies to Transnistria in case the transit stopped.[29]

Nevertheless, he said the answers they were receiving were "evasive". He suspected that many stakeholders were confident that the transit would continue even though Ukrainian officials were adamant that it would not be renewed.

Maciej Woźniak, EU senior non-key advisor to Energocom, echoed those views, stating that regardless of the outcome of transit discussions, Moldovan authorities should have devised an alternative plan for Transnistria.[30]

He said he had proposed the establishment of a gas stock for Transnistria in spring 2024 to demonstrate that Moldova was prepared for any scenario and to deter Russia from cutting supplies in an effort to blackmail the country's pro-EU government.

Sergiu Tofilat shared that view, insisting that Moldova should have devised an alternative plan to bolster security of supply on both banks of the River Nistru. Such a plan would not only have limited supply risks, but also sent a powerful political message that Moldova was serious about integrating both banks.[31]

However, Grujičić stated that Transnistria was invariably seen as a "toxic" subject and very few Moldovan officials were willing to tackle issues related to supplies and integration with the Right Bank head-on.

As Transnistria was running out of coal to generate electricity and gas to maintain the pressure in its pipelines, Moldovan and EU officials had to find a swift solution to avert yet another major crisis.

At the end of January, the European Commission announced that it was ready to disburse EUR 30 million to help secure gas deliveries to Transnistria on a "humanitarian basis", meaning the gas would be paid for by the EU.

An official working at the Directorate-General for Enlargement and Eastern Neighbourhood (DGENEST, formerly known as DG NEAR) said that his team had been closely monitoring developments since the start of the year and a decision was taken to intervene in the final days of January as the situation was becoming increasingly serious.[32]

Many interviewees praised the strong leadership of Gert van Koopman, Director-General for Neighbourhood and Enlargement Negotiations at DG ENEST, under whose guidance the department was able to agree on and disburse EUR 30 million within a week.[33]

The decision was subsequently taken to allocate EUR 20 million for the purchase and delivery of gas to the Left Bank for the first half of February and to transfer EUR 10 million to Moldova to help end-consumers on the Right Bank pay their utility bills following rising tariffs.[34]

More precisely, the EUR 10 million allocated to the Right Bank was designed to compensate all excess electricity costs for all households for up to 110 KWh every month until 31 December 2025. It also included a hardship fund to alleviate the energy bills of the most vulnerable households and to cover the entire increase in electricity costs for social institutions, including kindergartens, schools and hospitals.[35]

In parallel, the EU coordinated with Moldovan authorities on facilitating the transfer of gas, which was expected to arrive in the region at the start of February.

However, it was agreed that, before the EU-sponsored exports started, Moldovagaz would "lend" three million cubic meters to Transnistria to help the region maintain pressure in the system.[36]

On 1 February, at 9:00 local time, the Commission for Emergency Situations (CSE) approved a decision to allow Energocom to deliver the gas directly to Transnistria, suspending temporarily the legal conditions that had restricted Natural Gaz D.C. from delivering gas to the Left Bank.

Within minutes of securing the CSE decision, Energocom's started to receive phone calls from European traders offering to sell the gas.[37] Later that day, the Moldovan gas grid operator, VMTG, opened the valves to facilitate the transfer of gas to the Left Bank.

After a month of refusing to accept help, the Transnistrian President Vadim Krasnoselsky made history, thanking the EU and European Commission President Ursula von der Leyen for their support.[38]

It was a unique moment for Transnistria but also for the EU, which Constantin Borosan said had won a critical public relations race against Russia by showing that Brussels was there to support people in need.

Willem Coppoolse, group director at Ukraine-based trading company ERU, who had been following developments in Moldova since 2021, echoed those views, stating that the EU had played its hand very skilfully, turning the tables on Russia, which had sought to create a political crisis to position itself as the only one capable of solving it.[39]

S.R.L. “Tiraspoltransgaz” purchased natural gas on the trading platform in Chișinău approved by ANRE – S.R.L. “Romanian Commodity Exchange East,” with Eugeniu Buzatu, Interim General Director, and representatives of the Ministry of Energy, February 13, 2025.

Nevertheless, the EU’s pioneering attempt to reach out to Transnistria was encumbered by unforeseen events in neighbouring Romania.

Once the EU disbursed the funds and Moldovan policymakers gave the all-clear to Energocom to buy the gas, the state wholesaler turned to regional markets to secure approximately three million cubic meters daily for onward delivery to the Left Bank.

However, just as additional demand from Transnistria arose, regional consumption surged due to a cold spell while storage facilities in Romania were nearly depleted.

An investigation[40] conducted by Romania’s Ministry of Energy found that gas withdrawals had not been performed in line with agreed protocols throughout the heating season. As a result, Romania’s larger underground facilities were nearly empty by February.

The lack of stocks, rising demand from Transnistria and the cold spell pushed Romanian gas prices EUR 28.00/MWh over the benchmark TTF prices.

Prices also rose in neighbouring Bulgaria, which meant that purchases made on the local Balkan Gas Hub platform would carry a premium in addition to the high transmission costs charged by the Romanian gas grid operator, Transgaz.

Given these constraints, the money disbursed by the EU would last only for a limited period. After the first ten days of delivery in February, the Left Bank authorities had to decide on the next steps to take.

The EU was prepared to offer an additional EUR 60 million to help secure further gas supplies for Transnistria, but the funds were conditional on the release of political prisoners, guarantees of human rights, permission for Moldovan TV channels to broadcast in the region and implementation of progressive price alignments with the Right Bank.

After ten days of receiving EU-sponsored gas, authorities on the Left Bank decided to end the scheme, opting to switch to a Russian-backed arrangement.

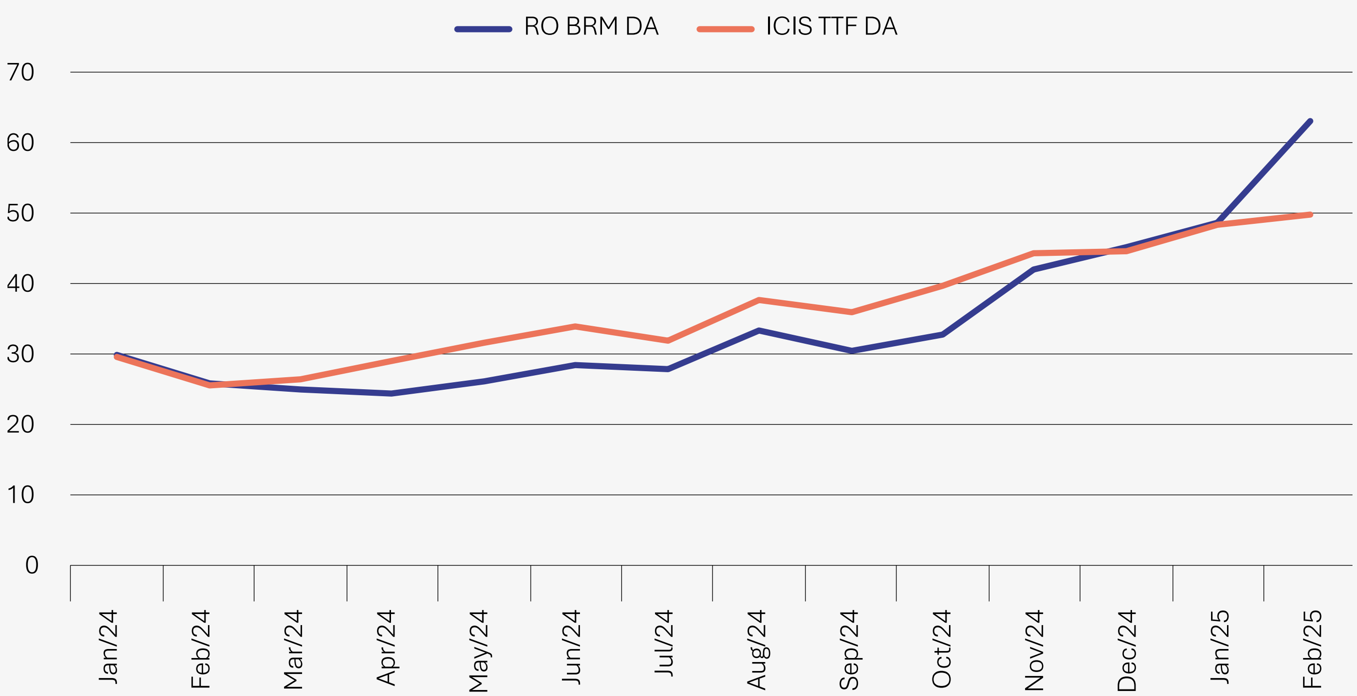


Figure 25. Monthly average of Romanian BRM and ICIS TTF day-ahead gas prices in EUR/MWh
Source: BRM, ICIS.

Nevertheless, some minor milestones were achieved, with the national TV station, Moldova 1, broadcasting in Transnistria for the first time in 33 years at the beginning of February.[41]

Under the new arrangement, the Swiss-based MET Group agreed to purchase gas on European hubs and deliver it to Moldovagaz, which in turn would supply it to Tiraspoltrangaz. The gas was to be paid for by a Dubai-based entity receiving the funds from Russia.

A source at Moldovagaz confirmed that the Dubai-based company received payments from Russia in roubles, which it then converted into euros and transferred to MET traders for purchases on gas hubs.[42]

However, the new arrangement only came into effect on 14 February, which meant that after the EU-backed scheme ended on 11 February, Transnistrian authorities had to find a temporary solution to tide them over.

State secretary Borosan said that, to his surprise, the Left Bank found enough funds to pay Moldovagaz for purchasing volumes on the local exchange BRM Est.

Ion Lupulescu, BRM Est's executive director, recalled how, on 11 February, Moldovagaz bid for volumes but the purchase could not be completed until 15 minutes before market close at 17:00 local time due to difficulties wiring the money from Transnistria to Moldova.[43]

The following day, when Moldovagaz entered the market once again, the process was smoother. However, Lupulescu said the previous day had been a race against time to persuade the banks—which had been reluctant to deal with Transnistrian authorities—to accept and confirm the payments.

Moldovagaz successfully purchased 2.6 mcm on 11 February and a further 2.7 mcm on 12 February.[44]

COMPREHENSIVE REFORM

Although Transnistria discontinued the EU assistance, opting for a temporary Russian-backed scheme, the support granted by the European Commission and the Energy Community brought about changes on both banks of the River Nistru.

Prior to the start of supplies to Transnistria on 1 February, a large delegation comprising representatives of the Energy Community, DG ENEST, the EU's Directorate General for Energy and the European External Action Service (EEAS) travelled to Moldova to discuss a comprehensive assistance package for both banks.

Under this strategy, the EU and Moldovan counterparts signed a letter of intent, in which the EU committed to disbursing EUR 250 million for 2025 to cover immediate and longer-term needs, with the funds to be rolled out in three stages.

In exchange, Right Bank policymakers were to agree to a roadmap accelerating comprehensive and substantial reforms, aligned with Moldova's commitments under the Energy Community Treaty and requirements arising from the enlargement process.

In concrete terms, this meant that, as a first step, Brussels would disburse EUR 30 million, of which EUR 20 million would be used to supply gas to Transnistria on a humanitarian basis.

The second step would involve allocation of a further EUR 100 million by mid-April 2025 to help alleviate higher bills for Right Bank consumers. The disbursement was made conditional on Moldova adopting reforms, including amendments to its natural gas market law by the same deadline.

Finally, as the third step, the Commission and international partners committed to financing actions and investments aimed at boosting Moldova's energy resilience and independence, as well as supporting the reduction of energy costs. The actions were due to be included in the Reform Agenda under the Moldova Growth Plan and implemented by the end of 2026.

The impact of the support package was expected to be felt most immediately by Right Bank consumers, as the bulk of the money allocated by the EU would be used to cover the entire excess electricity costs for all households for up to 110 kWh until 31 December 2025.

A representative of the EU's Directorate General for Energy (DG Ener)[45] stated that the Commission also agreed to compensate the entire increase in electricity costs for social institutions, including kindergartens, schools and hospitals, in the amount of EUR 20 million.

A dedicated hardship fund of EUR 25 million was also set to be established for the most vulnerable households to alleviate their energy bills. Meanwhile, agri-food and manufacturing businesses were allocated EUR 15 million in support towards their energy bills and an additional EUR 50 million was provided for readily available or quick-to-absorb investments in energy efficiency projects by local public authorities, households and small and medium-size enterprises (SMEs).[46]

To ensure consumers understood that their costs were largely supported by EU funds, the decision was taken to feature the EU logo on end-consumer bills, spelling out the assistance granted by the EU in times of need.

Meanwhile, Moldova was expected to adopt a number of steps in exchange for the financial support.

This included devising an investment plan to develop new power generation capacity and modernise the existing capacity, develop electricity balancing market services, improve the energy efficiency of buildings and modernise the heating system.

Secondly, Moldova was expected to develop a socially acceptable approach for progressive energy price alignment, accompanied by a robust and expanded mechanism for mitigating the impact of higher energy prices, in particular for the protection of vulnerable consumers.

Thirdly, it was expected to produce a clear strategy for ensuring that it can be decoupled from the insecurity associated with Russian gas supplies in the future, both in terms of gas use for heating and for electricity generation.[47]

At the time of completing the study in March 2025, the Moldovan government was consulting on proposals to amend the natural gas law to introduce a single gas distribution tariff to foster greater liquidity on the retail markets.

It also drafted plans for companies to hold annual gas stocks amounting to 15% of the country's gas consumption. Moldova does not have underground storage facilities and has been using those located in Ukraine and Romania in recent years.

Finally, the government was working on implementing a mechanism to designate an entity for delivery of gas to Transnistria, with the aim of stripping Moldovagaz of its supply licence.

Although Transnistria discontinued the EU-backed supply scheme, opting to continue the Russian-sponsored arrangement for an indefinite period, the EU's brief intervention brought some small but symbolic changes. Apart from the release of political prisoners and permission for some Moldovan TV stations to broadcast internally, it also had to consider increasing tariffs for end-consumers.

Since it is now responsible for underwriting the cost of the gas transport, the province decided to reflect this in end-consumer tariffs, which were raised for the first time in over a decade. The hikes apply to both tariffs for natural gas and electricity, with the latter being largely generated from the fuel.

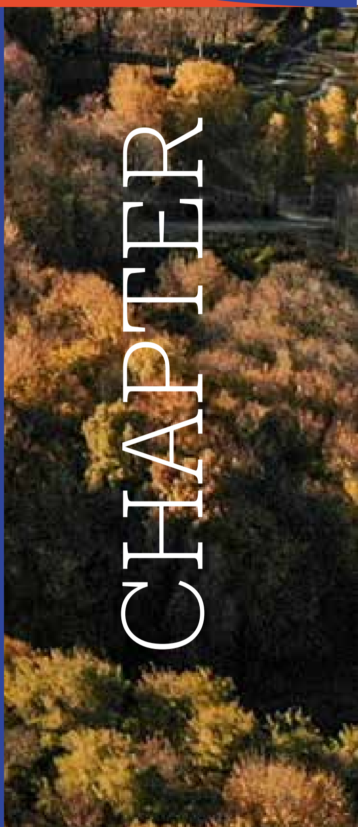
The cost of 1KWh of electricity increased from 0.54 to 1.39 Transnistrian roubles (USD 0.08/KWh), while the price for one cubic meter of gas rose from 0.81–1.12 to 1.70 roubles (USD 0.10/cubic meter). Market sources said the increase was symbolic, as tariffs would have to rise at least 10–15-fold to align with those for Moldovan consumers on the Right Bank of the River Nistru. Nevertheless, the EU's ability to reach out to one of Europe's most impoverished and isolated provinces and help to catalyse some critical changes should not be underestimated.

Consult this chapter endnotes at page 217.

A delegation from Brussels, led by the Director-General of the Directorate-General for Neighbourhood and Enlargement Negotiations (DG NEAR), Gert Jan Koopman (pictured) and the Director of the Energy Community Secretariat, Artur Lorkowski, visited Energocom on 3 February 2025, to learn about natural gas and electricity procurement during the energy crisis of winter 2025. The delegation also included the EU Ambassador to the Republic of Moldova, Jānis Mažeiks, and representatives of S.A. "Energocom."
Source: Energocom

CHAPTER 10

More challenges ahead?



Since October 2021,

Moldova has experienced some of the greatest crises in its recent history, bringing it perilously close to the collapse of its energy sector, but also compelling it to take decisive action to address a succession of errors and shortcomings that had been building up since it gained independence three decades earlier.

Russia's decision to limit gas supplies to the country of three million people at the start of winter 2021, hoping to deter its newly elected government from pursuing an EU integration path, was a precursor to the full-blown energy and humanitarian crises it would unleash a few months later after invading Ukraine in February 2022.

Except for winter 2023/24, the Republic of Moldova has been faced with emergencies each year from 2021, bearing the brunt of record energy costs after Russia cut gas exports to European buyers in 2022, which led to limited gas and electricity supplies to Right Bank consumers. At the same time, Russia sought to to freeze its own Russian-speaking population in Transnistria by cutting gas supplies, while attempting to shift the blame to the Moldovan government.

Yet each challenge presented an opportunity for Moldova to sever its historical dependence on Russia and move closer to gaining freedom to act independently.

When Russia limited gas deliveries, Moldova reached out to European partners, who managed against all odds to help it secure alternative supplies. Within a year, consumers on the Right Bank of the River Nistru transitioned from being entirely dependent on Russian gas to accessing supplies from other markets.

When the Russian-controlled power producer MGRES reduced and then suspended electricity flows from the left bank to the right bank of the River Nistru in October 2022, Moldova turned to neighbouring Romania for emergency supplies, proving once again that it had options even in times of extreme difficulty. The Romanian government quickly adopted an emergency measure through which Romanian generators offered electricity quantities to Moldova at the same reference price as for the Romanian domestic market, set at Romanian leu (RON) 450.00/MWh (EUR 90.00/MWh). That came at a time when electricity prices on the European spot markets were consistently over EUR 400.00/MWh. Several Romanian generators, such as Nuclearelectrica, Hidroelectrica and OMV Petrom, stepped in to supply emergency electricity to Moldova. That support measure for end-consumers of electricity in Moldova remains in force until

31 March 2025, with the reference price having been reduced to RON 400.00/MWh.

In addition, in October 2022, the government of Romania (through the RoAID international cooperation and development fund) also offered a EUR 10 million grant as direct budgetary aid to the Republic of Moldova to help combat the effects of the energy crisis affecting consumers in Moldova.[1]

Romania also donated 5,000 tonnes of heavy fuel oil with a market value of EUR 3.5 million to the district heating company of Chişinău to use as alternative fuel to natural gas.[2] Further aid in the form of 130,000 cubic metres of firewood was donated by Romania at the beginning of October 2022.[3]

When Russian-affiliated political groups in Moldova sought to stir social unrest as energy costs across Europe were soaring to record levels, authorities in Chişinău managed to avoid turmoil even as they were forced to raise end-consumer tariffs to align them with market values.

More importantly, Moldova finally took long-overdue decisions, including unbundling of its electricity and gas transmission operations. These steps should have been taken years earlier, but were repeatedly delayed, not least because of ongoing Russian opposition and deficient legislation. The decisions have brought the country closer to EU market rules, in line with its commitments as a Contracting Party of the Energy Community.

Finally, when Gazprom unilaterally halted gas supplies to Transnistria in an apparent attempt to trigger a political crisis on the Right Bank, Moldovan officials worked with the Energy Community and the EU to provide much-needed relief.

In hindsight, one of the greatest achievements that Moldova recorded over this short but intense period may have been the confidence it gained in asserting its rights and standing up to Russian blackmail.

Throughout this study, most European stakeholders who witnessed the rapid transformation of Moldova's energy sector and agreed to speak on the record invariably remarked how Moldovans had managed to overcome their ingrained fear of Moscow's influence, gaining faith in their ability to shape decisions.

LOOKING TO THE FUTURE

At the time of completing this study, Moldovans had already voted by a narrow margin for pro-EU constitutional changes and signalled their support for President Maia Sandu's second term at the ballot box in autumn 2024.

Nevertheless, the country still faces parliamentary elections in 2025. Although Sandu's PAS party remains the favourite,[4] it is uncertain whether it will clinch enough votes to form the majority needed to push through bold decisions in a second term.

The election results will be of critical importance because they will determine Moldova's ability to stay its European integration course, including in the energy sector.

In fact, over the months to come, Russian-sponsored groups could mount further disinformation campaigns,[5] promising access to cheap gas and electricity, fully aware that rising utility bills are a sore point for Moldovan voters.

The future of gas supplies to Transnistria will also be pivotal in shaping Moldova's future relations with Russia and could prove instrumental in the resolution of a decades-long frozen conflict with Transnistria.

The supply crisis of winter 2024/25, when Gazprom cut deliveries to Transnistria, exposed the Kremlin's readiness to sacrifice the well-being of the local Russian-speaking population merely to retain its grip on Moldova.

It also pushed Moldovan and EU policymakers to their limits, forcing them to step out of their comfort zone to devise an alternative plan for supplying gas to the province in times of need.

Although the arrangement was short-lived and Transnistrian authorities opted to revert to a Russian-backed scheme, the experience left an indelible mark.

Energy Community director Artur Lorkowski believes the offer of assistance made by the EU showed Transnistria had alternative options for doing business, allowing it to move away from Soviet-style dependence on one supplier.[6]

In summary, the EU made the most of a brief window of opportunity, positioning itself as a provider of humanitarian aid and long-term solutions, he said.

Nevertheless, as this study was coming to an end, Transnistrian authorities were still clinging on to a temporary solution proposed by Russia, holding out hope for normalisation of the situation if Moscow and Kyiv were to agree to renew the historical gas transit at some point in future.

With each passing month and the war in Ukraine still raging, the prospect of an immediate resumption in shipments via this country looks slimmer by the day.

The current arrangement is unsustainable and both banks of the River Nistru will need to find an alternative solution that is commercially viable in the long-term.

Although there are numerous options to secure gas from elsewhere, the greatest challenge remains that of aligning consumer tariffs on the two banks.

Higher gas import costs in Transnistria would also translate to more expensive prices for electricity generated there and exported back to the Right Bank.

Raising energy bills for Transnistria's impoverished population to cover the gap between heavily subsidised tariffs paid by the region's consumers and the market price of gas sourced on markets could spark social unrest, which Moscow might attempt to exploit politically during Moldova's prolonged series of elections in 2024-2025.

It would also mean Moldovan consumers themselves would have to pay higher prices for electricity generated in Transnistria, since the fuel used to generate it would be bought at market prices rather than subsidised prices.

Although such a solution could help to end a decade-long conflict in the long term, as the two banks of the Nistru would be economically integrated, in the shorter term it is fraught with risks, which politicians may not be prepared to take.[7]

It is for this reason that the Right Bank needs to fast-track plans to scale up its electricity generation capacity and complete its electricity interconnections with Romania, as well as work with the EU and the Energy Community to devise a long-term plan for the integration of Transnistria.

Yet, even if all these issues were addressed, settling Moldova's historical debt to Gazprom remains a formidable challenge, whose outcome will determine the country's ability to continue EU reforms and set its own energy agenda.

The importance of settling this debt became evident at the start of 2025, when Gazprom justified its decision to cut supplies to Transnistria by citing Moldova's inability to resolve the issue.

As discussed in detail in chapter 1, the Right Bank's debt started to accrue in the 1990s on the back of steep import price rises and hefty penalties for non-payments imposed by Russia at a particularly traumatic time, when Moldova was facing Transnistria's separatist war and declining economic output.

To pay some of the soaring debt, Moldovan authorities transferred transmission and distribution assets on both banks to Gazprom, although in many instances the assets were undervalued or used to clear the Left Bank's likewise mounting debt.[8]

Over the years, Gazprom used Moldova's soaring debt and control over most of its transmission and distribution assets to block the country from securing alternative supply arrangements or unbundle supply and transmission operations in line with EU rules.

By October 2021, with Moldovans having voted in a new pro-EU government, Gazprom once again wheeled out the debt issue, making an increase in gas supply to meet the upcoming winter demand conditional on the Right Bank paying off its outstanding arrears.

Subsequently, it agreed to renew a long-term supply contract, as authorities in Chișinău pledged to carry out and submit an independent audit by May 2022.[9] The negotiation protocol signed on 29 October 2021 stipulates that the debt will be fully settled over the course of five years.[10]

Publication of the audit was delayed by more than a year, not least because of attempts by Russia's Gazprom to intervene in the process and a lack of bids by non-conflicted auditors.[11]

By 2022, the Moldovan government tasked the Public Property Agency (APP) with engaging external auditors. APP eventually selected Norway-based lawyers Wikborg Rein and UK-based consultants Forensic Risk Alliance (FRA) to verify the debt for gas delivered to consumers on the right bank of the River Nistru between 29 August 1991 and 31 October 2021.

The report was due to be published at the end of January 2023 but was delayed until June 2023 owing to difficulties experienced by the auditors in obtaining supporting data throughout their research.

The auditors found that, as of 31 October 2021, the Right Bank's debt amounted to USD 756,584,129, although they note that the total amount of counterclaims and recommended write-offs could exceed the total debt.

While the Right Bank's debt is discussed in depth in chapter 1, the Wikborg Rein–FRA report raises some critical points, which may need to be taken into consideration in the coming years if Moldovan authorities are called upon to settle the debt.

Firstly, it finds that Moldovagaz could require as much as USD 278,164,061 to be written off, as no records were available to prove the existence of that debt. This includes the USD 275,914,205 that had been assigned to Factoring Finance, a subsidiary of Gazprom's daughter company Gazprominvestholding.

The auditors note that they reached out to Gazprom via APP, the deputy prime minister and the Ministry of Infrastructure and Regional Development to request supporting data for the debt allegedly accrued in the period prior to the establishment of Moldovagaz in 1999, but did not receive any response.

Right Bank's Audited Debt: USD 756.6 Million

An independent audit by Wikborg Rein and Forensic Risk Alliance (FRA) confirmed the Right Bank's historical gas debt to Gazprom at USD 756,584,129, though auditors noted that counterclaims and write-offs could exceed this amount.

Up to USD 278 Million in Disputed Claims

Auditors found that USD 278,164,061 might need to be written off due to a lack of documentation, including USD 275.9 million assigned to Factoring Finance, a subsidiary of Gazprominvestholding, with no records to substantiate the debt.

Attempts to find the missing information in national archives and other relevant institutions also fell through, since the available data were available at summary rather than detailed level.

They also note that, although the management of Moldovagaz actively engaged with the auditors, they were nonetheless unable to provide information for the period after 1 January 2003 within the required timeframe.

Secondly, the auditors found that of the remaining USD 478,420,068, around USD 400,000,000 is subject to arbitral awards in Russian courts issued between 2008 and 2020, which can no longer be enforced in Moldova and may therefore need to be written off.[12]

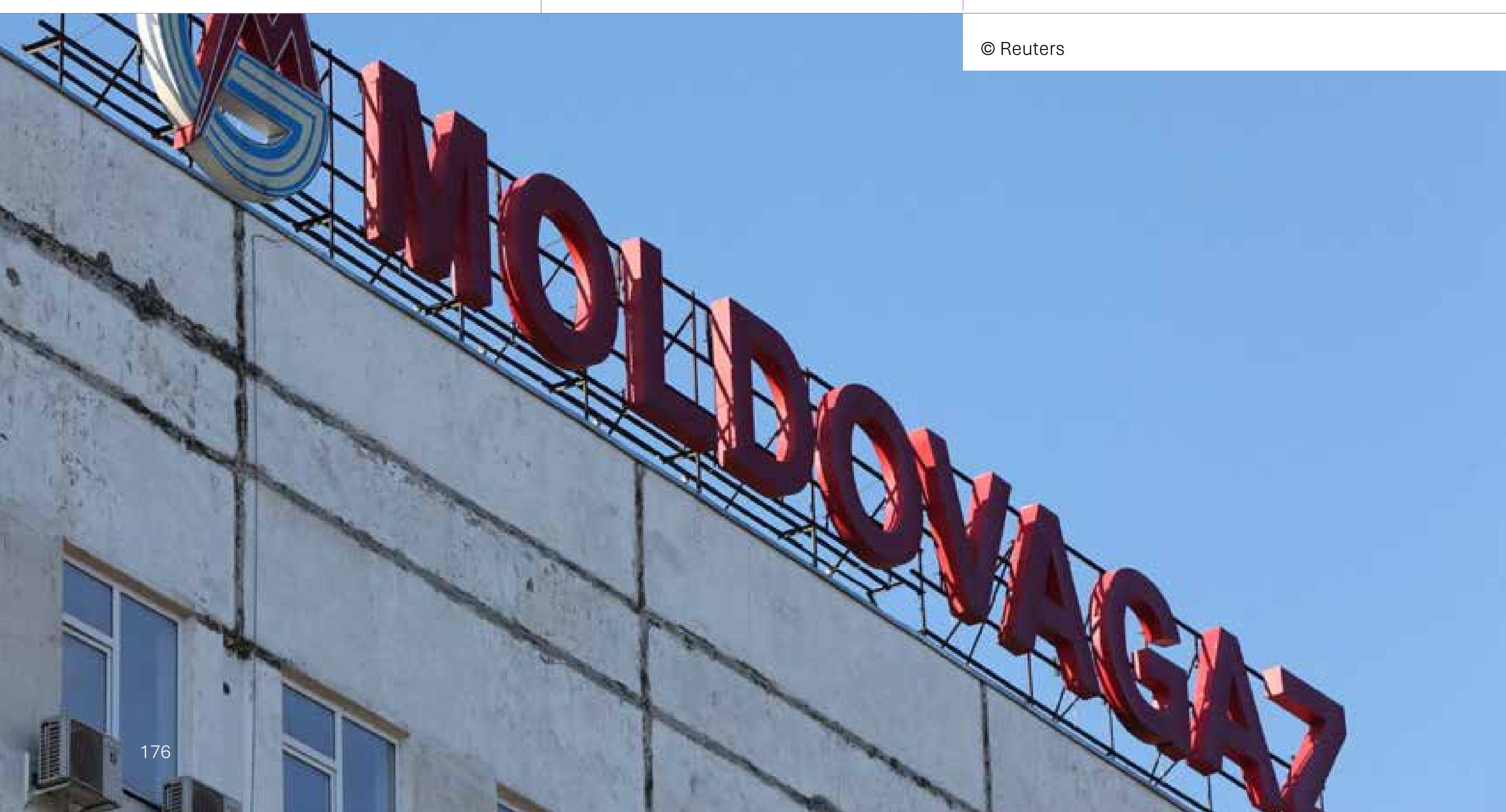
Thirdly, the independent audit points out that the Right Bank itself may have counterclaims of its own against Gazprom amounting to approximately USD 160,000,000. Those counterclaims relate primarily to lost transit revenues paid by Gazprom to the Left Bank operator, Tiraspoltransgaz.

Another counterclaim plus associated penalties paid by Gazprom may stem from the Russian producer's breach of its delivery obligations to Moldovagaz and the Right Bank since October 2022.

Fourthly, the auditors note that Moldovagaz made a number of investments and incurred expenses amounting to USD 143,000,000 between January 2011 and December 2020, which have not been recognised by the regulator as economically justified.[13] If Gazprom, as the majority shareholder, had approved those expenses, Moldovagaz would have been in the position to require that an equal share of the debt be written off.

Fifthly, the auditors report that they have discovered irregularities and illegalities in the founding of Moldovagaz and its predecessor Gazsnabtranzit, particularly with regard to the assets transferred by the Moldovan state to the founding capital of those companies in payment for delivered gas.

The auditors state that the assets had been valued in a manner contrary to the prevailing laws of Moldova at the time, which may have led to their significant undervaluation. However,



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the auditors conceded that this could not be quantified due to a lack of supporting documents.

Furthermore, some assets on the Right Bank were reportedly wrongfully transferred in payment for the Left Bank's debt. An alleged debt amounting to USD 47,300,000 was "incorrectly" not set off against Gazsnabtranzit's equity when that company was merged with Moldovagaz.[14]

Sixthly, the penalties accrued by Moldovagaz before 2006, and in particular before 1999, may have been excessive and could be challenged under relevant Russian legislation, the auditors report. That in itself would be an argument for writing off the debt allegedly incurred before 1 January 2003, which includes USD 165,757,466 of accrued interest and penalties.

Finally, the auditors note that Gazprom itself had allowed debts to accumulate without taking steps to enforce payment or restructure Moldovagaz. As a result, the auditors concluded, it would be reasonable for Gazprom to write off all or significant parts of the debt.[15]

Following publication of the independent audit, former Moldovan energy minister Victor Parlicov stated, based on the audit's findings, that the Right Bank's outstanding debt to Gazprom amounts to USD 8,600,000, noting that Chişinău did not intend to pay "non-existent" debts.[16]

Nevertheless, by the end of 2023, Vadim Ceban, chairman of Moldovagaz's supervisory board, stated that the company's historical debt to Gazprom could only be settled by consensus of the shareholders, noting at the time that the incumbent did not have sufficient funds to pay off the USD 709 million claimed by Gazprom.[17]

Arcadie Vicol,

founder of Natural Gaz D.C. who had worked for Moldovagaz, also disputed the Wikborg Rein findings, arguing that the outstanding debt could not be written off under Moldovan and Russian legislation.[18]

Although the audit, along with the report by Moldova's Court of Auditors published in 2022,[19] helps to shed light on the arrangements that were put in place and led to soaring debt for the Right Bank, there is very little clarity as to the rising debt incurred by the Left Bank over the past three decades, which is thought to exceed USD 10 billion,[20] more than half of Moldova's GDP of USD 16.5 billion in 2023.

Moldovan gas expert Sergiu Tofilat, who has conducted research into Moldova's gas debt, said there were strong arguments in support of writing off Transnistria's debt.[21] This is because Gazprom continued to supply gas to the region via Moldovagaz, knowing that it can never receive any payments because Moldovagaz's assets cover as little as seven percent of the total debt, even though the debt of the Left Bank kept mounting to ever new heights.

Disputed and Legally Inapplicable Debt: ~USD 400M

Of the remaining USD 478.4 million, approximately USD 400 million is tied to arbitral awards from Russian courts (2008–2020) that are unenforceable in Moldova and may need to be written off.

Counterclaims by Moldova: ~USD 160M

The Right Bank may hold counterclaims worth around USD 160 million against Gazprom for lost transit revenues and breaches of delivery obligations since October 2022.

Unjustified Investments: USD 143M

Between 2011–2020, Moldovagaz made USD 143 million in investments and expenses that the Moldovan regulator did not recognise as economically justified—potential grounds for debt write-off.

Settling the debt on the right bank of the River Nistru at least will remove a major economic and political vulnerability for Moldova, giving it greater autonomy to set its own energy agenda in line with national interests.

As of summer 2025, it was unclear how the issue would be resolved, considering numerous unknowns that could influence the outcome. These range from political decisions taken in Moldova to the future of Gazprom itself, a company that is already severely weakened[22] by the loss of its European markets in the wake of Russia's full invasion of Ukraine.

Moldova may have two options to settle the debt.[23]

One option would be for the Agency for Public Property (APP), as the Moldovan shareholder in Moldovagaz, to file claims against Gazprom, the other shareholder, based on the findings of the audit report.

The other option would be to launch an investigation into possible historical fraud at Moldovagaz and initiate a court case against the beneficiaries of the embezzled funds.[24]

Even so, the issue is highly complex and would require resolve on the Moldovan side to push the matter through.

Beyond the challenges that still lie ahead for Moldova, the achievements that have been made in the last three years need to be sustained.

These include consolidating the country's electricity balancing market and preparing for its coupling with EU markets. Such steps would allow Moldova to finalise its bid to become a fully-fledged member of the European Network of Transmission System Operators for Electricity (ENTSO-E) following its synchronisation with the continental European grid in March 2022.

Other tasks encompass completion of its proposed three interconnection lines with Romania, which will allow the Right Bank to end its reliance on the Transnistrian MGRES power plant.[25]

While Moldova is preparing for greater market liberalisation in the gas sector, with larger consumers expected to secure volumes on organised markets from 2026, both the gas and the electricity markets remain imperfect and highly concentrated.

The Moldovan government had argued that placing the state wholesaler Energocom at the core of the electricity market, with responsibility for buying electricity from producers and reselling it to consumers on the Right Bank, would guarantee security of supply at affordable prices for consumers.

This should also be considered a temporary solution until the Moldovan interconnection with Romania and more domestic generation capacity are developed.

Similarly, the large shares of the retail market held by Moldovagaz and Energocom should be reduced to foster greater competition on the market, which will ultimately benefit local consumers.

Moldova is still a long way from having fully functional electricity and gas markets but the overdue measures that have been taken so far are a step in the right direction.

In light of the extensive history of corruption across all energy companies, the corporate governance of energy companies is an essential element for sustainable development. The establishment of corporate governance structures should be carried out publicly on a competition basis and with monitoring by international partners to exclude the influence of vested interests and ensure independence.

Independent advisory boards to the energy companies should be established that include stakeholders from the EU, alongside local specialists. These boards should cooperate with the Ministry of Energy and foreign donors to provide policy recommendations to enhance the investment climate and good governance.

Although Moldova's to-do list for the months and years to come remains long and taxing, Artur Lorkowski is convinced that Moldova has gained the most important skill needed to meet future challenges and that is the ability to manoeuvre.

Just like steering a boat,

the objective all along, he said, has been for Moldova to regain control and confidence to guide its own future. As a sailor, the Energy Community director believes that, just like a sailboat, it is important for Moldova to stay manoeuvrable but always heading towards Europe, even if that journey may be at a slower pace for now.

After Ukraine, Moldova has been the country second most affected by Russia's war, but it has learnt to stay afloat even in the face of violent storms.

Consult this chapter endnotes at page 220.

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Endnotes

INTRODUCTION

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61 https://www.icis.com/explore/resources/news/2021/11/01/10700724/moldova-agrees-russian-gas-deal-delays-tso-unbundling-by-another-year/

62 https://energie.gov.md/sites/default/files/20230602_final_report_wr_fra_rev117725439.1.pdf

CHAPTER 2.

1 As recounted by former Moldovan prime minister Ion Sturza (1999) in an interview with the author (28 January 2024)

2 Ibid.

3 Article 3.2 of the 2006 contract between Moldovagaz and Gazprom, https://www.rise.md/contract-confidential-imperiul-gazprom-in-moldova/

4 Sergiu Tofilat explained in a written note on 18 August 2024 that in the period 2007-2010, the price was increased annually in line with a variable coefficient. The idea was for the price to gradually reach the average price at which Gazprom was selling gas in the EU in 2011. Thus, for 2008, Moldova paid the average European price times the coefficient (k=0.75). In 2009, the coefficient rose to 0.8, in 2010 it was set at 0.9 and in 2011 it had already reached parity with the fixed price quoted by Gazprom to EU countries

5 https://www.reuters.com/world/europe/russia-says-it-has-agreed-lift-trade-restrictions-with-moldova-2021-08-11/

6 https://www.icis.com/explore/resources/news/2020/07/01/10525031/ukrainian-top-trader-eru-starts-first-gas-exports-to-romania/

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9 As explained by Constantin Borosan, secretary of state at the Ministry of Energy, in an online call with the author on 22 June 2024

10 As explained by Denis Tumuruc, Energy Community expert in a written note on 23 October 2024.

11 As mentioned by Predrag Grujičić, head of gas unit, Energy Community Secretariat, in an interview with the author on 17 June 2024

12 As explained by EBRD representatives working on Moldova in a Teams call with the author (10 May 2024)

13 “Gazprom offered Moldova new gas deal in exchange for weaker EU ties”, Financial Times, 26 October 2021. https://www.ft.com/content/138a0815-98bd-42b8-b895-49e89b980a99

14 As explained by Moldovan gas market expert Sergiu Tofilat in a Teams call with the author (19 April 2024)

15 https://www.mold-street.com/?go=news&n=12833

16 As explained by Vadim Ceban, CEO of Moldovagaz in a Teams call with the author (19 April 2024)

17 Online interview with Moldovan gas market expert Sergiu Tofilat (19 April 2024)

18 As recounted by Torsten Wöllert, EU energy counsellor, in a Teams call with the author on 29 May 2024

19 As recounted by Diana Jabłońska, head of unit for Georgia, Moldova and Economic Investment Plans for Eastern Neighbourhood at DG NEAR, in an online call on 8 November 2024

20 Sergiu Tofilat said in a note sent on 18 August 2024 the more likely sum that was discussed at the time was much higher, assuming the country needed 500 million cubic metres of gas for consumption throughout the winter months. The reference Dutch TTF front month price was hovering around EUR 90/MWh at the time (USD 957.6/1,000 m3)

21 As explained by Constantin Borosan in an interview with the author on 22 June 2024

22 As recounted by Adrian Pritula, former acting director of Energocom, in a Teams call with the author on 19 April 2024

23 As explained by Constantin Borosan in an interview with the author on 22 June 2024

24 As recounted by Willem Coppoolse in a phone call with the author on 19 June 2024

25 https://gov.md/sites/default/files/document/attachments/raport_cse_pe_starea_de_urgenta_2.pdf

26 An Operational Balancing Account (OBA) is a continuous balancing account between a gas transmission system operator and immediately neighbouring operators to manage differences at network points

27 As explained by Sergiy Makogon, former CEO of GTSOU (2019-2022), in an online call with the author (9 May 2024)

28 Renamed as Energy Traders Europe

29 https://gov.md/sites/default/files/document/attachments/dispozitia_1_cse-cu_modificari_1_002.pdf

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31 As recounted by Torsten Wöllert, EU energy counsellor, in a Teams call with the author on 29 May 2024

32 Ibid.

33 Ibid.

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36 As explained in an online interview with former Moldovan prime minister Ion Sturza in an online call on 22 May 2024

37 Ibid

38 As noted by Wöllert and Coppoolse

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2 Ibid.

3 See discussion in chapter 2

4 As explained by energy market expert Sergiu Tofilat in an online interview with the author on 19 April 2024

5 Ibid.

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11 As recalled by Diana Jabłońska in an online call on 8 November 2024

12 Ibid.

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16 As described by Energy Community director, Artur Lorkowski, in a written note on 26 October 2024

17 As recounted by Professor Alan Riley in an online call on 3 July 2024

18 Ibid.

19 As explained by Alexandru Săndulescu, member of the EU High-Level Advisers Mission to Moldova for the energy sector, in an online interview on 8 May 2024

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28 As explained by secretary of state Constantin Borosan in an online interview on 23 June 2024

29 As explained by EBRD senior banker Octavian Costas in an online interview on 10 May 2024

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32 As explained by Smaranda Miron, senior energy and disputes lawyer at the Energy Community, in a written response sent on 17 July 2024

33 Opinion 2/23 pursuant to Article 3(1) of Regulation (EC) No 714/2009 and Article 10(6) of Directive 2009/72/EC – Republic of Moldova – Certification of Moldelectrica, Energy Community Secretariat, 12 May 2023

34 Annual Implementation Report 2022, Energy Community Secretariat

CHAPTER 4.

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2 There are 40 grids from 36 countries including EU Member States and countries in the immediate neighbourhood

3 Discussions were initially held with UCTE (Union for the Coordination of Transmission of Electricity), which along with five other regional associations was merged into ENTSO-E in December 2008

4 As explained by Iurie Cazacu, head of electricity regimes and forecasting division at Moldelectrica, in a Teams interview on 3 July 2024

5 Ibid.

6 Ibid.

7 As explained by Mariia Tsaturian, former head of communications and international cooperation department at Ukrenergo, in an online call on 24 June 2024

8 Ibid.

9 https://www.parlament.md/Actualitate/Comunicatedepresa/tabid/90/ContentId/6921/language/ro-RO/Default.aspx

10 Ibid.

11 Ibid.

12 Ibid.

13 As explained by Iurie Cazacu, head of electricity regimes and forecasting division at Moldelectrica, in an online call on 3 July 2024

14 As recounted by Mariia Tsaturian, Ukrenergo's former head of communications, in an online call on 24 June 2024

15 As explained by Antonio Albino Marques, coordinator for the Continental Europe region of the ENTSO-E Operations Committee, in an online call on 12 August 2024

16 https://www.consilium.europa.eu/media/54571/en20220228-final-presidency-summary.pdf

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20 As recounted by Mariia Tsaturian on 24 June 2024

21 Ibid.

22 As explained by Alexandru Săndulescu, in an online call on 8 May 2024

23 As recounted by Ukrenergo's Mariia Tsaturian on 24 June 2024

24 As explained by Moldovan secretary of state Constantin Borosan in an online call on 23 June 2024

25 As explained by Moldelectrica's Iurie Cazacu in an online call on 3 July 2024

26 As explained by ENTSO-E's Albino Marques in an online call on 12 August 2024

27 As recounted by secretary of state Constantin Borosan in an online interview on 23 June 2024

28 As explained by Victor Bînzari, currently Energocom's acting CEO, in an online call on 28 May 2024

29 As recalled by Energy Community director Artur Lorkowski in a written note of 26 October 2024

30 Ibid.

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33 As explained by Energocom's Victor Bînzari in an online call on 28 May 2024

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36 As described by Artur Lorkowski in an online interview on 17 October 2024

37 Moldova Security of Supply Statement, Annex 1 to the order of the Ministry of Infrastructure and Regional Development No. 200 from 11 November 2022, Energy Community

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39 As explained by Moldelectrica's Iurie Cazacu in a Teams call on 3 July 2024

40 Moldova Security of Supply Statement, Annex 1 to the order of the Ministry of Infrastructure and Regional Development No. 200 from 11 November 2022, Energy Community

41 Ibid.

42 Ibid.

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44 As explained by Moldelectrica's Iurie Cazacu in an online call on 3 July 2024

45 Ibid.

46 Ibid.

47 Ibid.

48 Ibid.

49 As mentioned by Nikolaos Tourlis, managing director, Tetra Tech, on 22 May 2024

50 Balancing groups are tasked with managing the balancing act between power feed-in and offtake, ensuring that the amount of power consumed and produced within the grid is equal. For further details, see https://www.next-kraftwerke.com/knowledge/balancing-group

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2 As mentioned by former government official and senior USAID energy project manager Denis Tumuruc in an online interview on 14 August 2024

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5 A financial instrument allowing the borrower to borrow on an ongoing basis while repaying the balance in regular payments

6 OBAs are used to manage flow differences at border points between adjacent networks

7 “Raport privind actiunile intreprinse pe perioada starii de urgenta” (22 octombrie 2021-30 decembrie 2023), CSE

8 As explained by Maciej Woźniak in an online interview on 30 July 2024

9 As explained by Romanian energy expert Lucian Indrieș in an online interview on 29 August 2024

10 Namely EP Commodities (Czech Republic), PGNiG Supply & Trading GmBH (Poland/Germany), DXT International SA (Switzerland), AXPO Bulgaria EAD (Bulgaria/Switzerland), ERU Europe GmBH (Austria/USA), ENGIE Energy Management Romania (Romania/France), Nika-Agrotrade (Ukraine)

11 According to an Energocom note

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17 As mentioned in an online discussion with Nikolaos Tourlis on 22 May 2024

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29 Ibid.

30 Ibid.

31 https://www.icis.com/explore/resources/news/2023/10/06/10931546/updated-moldova-s-energocom-snaps-up-more-gas-rejects-anti-competition-claims/

32 Ibid.

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35 As explained by Energocom's Victor Bînzari in an online interview on 19 August 2024

36 Ibid.

37 As explained by Energocom's Victor Bînzari in an online call on 19 August 2024

38 Raport privind actiunile intreprinse pe perioada starii de urgenta' (22 octombrie 2021-30 decembrie 2023), CSE

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CHAPTER 6.

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13 Ibid.

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38 A Carnegie Endowment report claims electricity was produced at MDL 1,19/KWh in 2023 compared to MDL 3,72/MWh for electricity produced in Ukraine prior to Russia's attacks in 2022. https://carnegieendowment.org/russia-eurasia/politika/2024/01/is-moldova-ready-to-pay-the-price-of-reintegrating-transnistria?lang=en

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CHAPTER 7.

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11 Ibid.

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13 Ibid.

14 Written note by Smaranda Miron, senior dispute and energy lawyer at the Energy Community, 17 July 2024

15 Ibid.

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36 Ibid.

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39 Ibid.

40 The Energy Community Secretariat quotes an independent report by auditors BDO Audit & Consulting LLC, a Bucharest-based consultancy

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43 Ibid.

44 Those exclude the transmission network on the Left Bank of the Nistru and VMTG's own transmission assets

45 The remaining 22% is split between the local public authorities, which own 10,56%, the Moldovan government through the Ministry of Infrastructure, which owns 2,77%, JV Rotalin Trading LLC, which owns 1,52%, Garma Group LLC, which owns 0,003%, and UMG Prikarpattransgaz Ukraine, which owns 0,62%. Chapter 1 discusses how the transmission system was expanded in the 2000s as many local authorities made financial contributions to expansion of the grid.

46 The Secretariat's Opinion 2/24 on certification of Vestmoldtransgaz, Energy Community Secretariat, 24 June 2024

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48 See point 2.1 of Decision 80/2023 CSE https://gov.md/sites/default/files/document/attachments/dispozitia_cse_nr._80_din_04.09.2023.publicare.pdf

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50 Ibid.

51 As stated by Dirk Buschle in an online discussion on 26 July 2024

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34 Sabadus, A. "Moldovan consumer exit tariff hits gas market competition, say shippers", ICIS, 11 October 2023. https://subscriber.icis.com/news/energy/news-article-00110932873

35 He explained that Moldovagaz operates 12 distribution companies. If the gas is supplied by Moldovagaz to its own suppliers, the company requires only one distribution contract regardless of where the gas is delivered within the distribution system. However, since Natural Gaz was not part of Moldovagaz, it was required to arrange contracts with two of the distribution companies responsible for taking the gas from its entry point into the system up to Arcadie Vicol's house. One of the companies involved, Chişinău Gaz, declined to offer a distribution contract because the delivery address was not within its catchment area

36 Ibid.

37 The subsidiary was initially called BRM East Energy but later renamed BRM East. For more details, see Sabadus, A. "Moldovan BRM to organise gas trading as market liberalises", ICIS, 8 April 2024 https://subscriber.icis.com/news/energy/news-article-00110988091

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CHAPTER 9.

1 Initially named BRM East Energy

2 The issue was fiercely debated as many observers said the gas would in fact be of Russian origin but labelled as Azeri gas to avoid widespread criticism from the Ukrainian and European public. For a full discussion see: https://www.pravda.com.ua/eng/columns/2024/08/27/7472152/

3 To see all the relevant details, check the BRM Est page, selecting "Ring Simplu Competitiv" https://brmeastenergy.md/piata-forward-gn/

4 According to a letter sent by Sergiu Tofilat to Moldovagaz and the Ministry of Energy on 18 July 2024 and seen by the author

5 According to Sergiu Tofilat, online discussion on 28 March 2025.

6 According to Victor Parlicov, online discussion on 17 March 2025

7 As mentioned by Sergiu Tofilat in an online interview on 28 March 2024

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9 Victor Bînzari remained as advisor to the new acting CEO of Energocom, Eugeniu Buzatu

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11 As explained by Ion Lupulescu, executive director, BRM Est in an online call on 17 March 2025

12 As mentioned by Energocom representatives in an online call on 26 February 2025

13 As confirmed by Victor Parlicov in an online discussion on 18 March 2025

14 https://cepa.org/article/tales-of-the-unexpected-how-ukraine-may-save-russias-gas-industry/

15 According to a letter sent by Moldovagaz to the Ministry of Energy and seen by the author

16 As explained by Victor Parlicov in an online discussion on 18 March 2025

17 Parlicov explained that there are seven interconnecting power lines linking Moldova to Ukraine, six of which cross Transnistria. Two of the six that cross Transnistria stretch from Podolsk in Ukraine to Rîbniţa on the Left Bank of the River Nistru

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21 As discussed with Constantin Borosan, secretary of state at the Ministry of Energy on 15 March 2025

22 See the relevant discussion in chapters 1 and 10 of this book

23 As explained by Constantin Borosan, secretary of state at the Ministry of Energy, on 15 March 2025

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30 As explained by Maciej Woźniak, *EU senior non-key advisor to Energocom, in an online discussion on 27 February 2025*

31 As explained by Sergiu Tofilat, former Moldovagaz supervisory board member, in an online discussion on 28 March 2025

32 As explained by an EU official at DG ENEST in an online interview on 21 March 2025

33 The EU official at DG ENEST said that the funding could be secured immediately thanks *to strong leadership from Gert Jan Koopman, director general at DG ENEST, who had a good understanding of how to secure the funds and advance the project*

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OPPORTUNITY IN ADVERSITY

Fast-tracking reform of the Moldovan electricity and natural gas sectors

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